# 2025 LUNG INSTITUTE

Baylor Medicine

**LUNG INSTITUTE** 

## DIRECTORY OF SERVICES

Airway Disease Program **Upper Airway** Tracheal Disorders Asthma COPD Airway, Voice & Swallowing Center Laryngoglotic Dysfunction Clinic Dysphagia & Swallowing Subglottic Stenosis Allergy & Immunology Airways Clinical Research Center (ACRC) Advanced Lung Disease Interstitial Lung Disease Pulmonary Fibrosis Sarcoidosis Advanced Lung Support Program **ECMO** Critical Care, ARDS Aspiration, Reflux & Foregut Bronchiectasis Cystic Fibrosis Center Non-CF Bronchiectasis Program NTM Program Chest Wall Resection + Recon Clinic Congenital Lung Disease Clinic Concierge Clinic General Evaluation Clinic (cough & unexplained dyspnea) Human Genome Sequencing Center Genetics Genomics Interstitial Lung Disease Research Interventional Pulmonary Service Lung Nodule Clinic Lung Imaging & Ablation Interventional Pulmonary Team Interventional Radiology Team Thoracic Surgery Team Lung Cancer Screening Programs Lung Transplant Program Palliative Care Program Pediatric Lung & Pulmonology (Texas Children's Hospital) Pleural Disease Program Endometriosis Mesothelioma Treatment Center

Benign Pleural Disease

Post-COVID Care Clinic
Pulmonary Hypertension & CTEPH
Pulmonary Rehabilitation
Robotic Cardiothoracic Surgery Center
Sleep Medicine Center
Systems Onco-Immunology Laboratory (SOIL)
Biorepository
Smoking Cessation Clinics
Translational Thoracic Oncology Research La
Thoracic & Lung Cancer Program
Multidisciplinary Care Teams
Medical Oncology
Pathology
Radiation Oncology

Interventional Pulmonary Medicine

Tracheobronchoplasty Clinic Trauma-Associated Lung Injury Team Undiagnosed Disease Network (UDN)

#### THE LUNG INSTITUTE

Radiology

**Thoracic Surgery** 

713-798-5864

THORACIC SURGERY

713-798-6376

**PULMONARY MEDICINE** 

713-798-2400

SLEEP MEDICINE

713-798-3300

## DIRECTOR'S MESSAGE

The Baylor College of Medicine Lung Institute provides comprehensive diagnostic evaluation and treatments to patients with lung disease.

My first year as director of the Lung Institute consisted of establishing connections for members to work together in teams. With more than 300 members present in more than seven hospital locations, we have over 50 multidisciplinary specialty clinics or centers of excellence that focus on patients with a variety of lung diseases.

Our physicians and surgeons are international experts in lung disease. Together, they offer comprehensive services, including highly specialized care to patients. It is my honor to lead such a distinguished group of specialists who have such dedicated focus on the patient.

Black

Shanda Haley Blackmon, M.D., M.P.H.
Professor of Surgery
Olga Keith Wiess Chair of Surgery III
Director, The Lung Institute
Baylor College of Medicine



### **Our Promise**

Patients are at the heart of everything we do.

To us, this means delivering individualized cuttingedge diagnosis and treatment in a compassionate manner to each individual. Our patients have access to the latest advances in medicine thanks to close collaborations between our physicians and scientists.

#### Mission:

The Mission of the Baylor College of Medicine Lung Institute is to advance lung health through knowledge, discovery, intervention and education to best serve the world. We provide the Baylor College of Medicine community with advice, tools and resources to facilitate excellence in lung health.

#### Vision:

As experts in lung health, we provide exceptional service to Baylor College of Medicine's patients, schools, centers, affiliated hospitals and clinics, research programs, collaborators, affiliated industry partners and learners that enable Baylor to pursue extraordinary opportunities and achieve their patient care, prevention, research, teaching, innovation and learning goals.



#### **Lung Institute Faculty and Staff**

#### **Director**

Shanda Blackmon, M.D., MPH

#### **Administrative Lead**

Stephanie Middleton

#### **Operations Manager**

Dawn Marshall

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#### **Steering Committee:**

Fidaa Shaib, M.D.

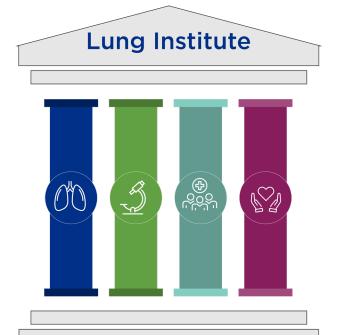
Subin Valayil, PA

Philip Alapat, M.D. Tara Lynn Barto, M.D. Shanda Haley Blackmon, M.D. Ramiro Fernandez, M.D. Shawn Groth, M.D. Nicola Alexander Hanania, M.D. Farrah Kheradmand, M.D. Gabriel Loor, M.D. Prasad Manian, M.D. Dawn Marshall Stephanie Middleton Sarah Morrissey, NP Ivan O. Rosas, M.D. R. Taylor Ripley, M.D. Nirmal Sharma, M.D. Javeryah Safi, M.D.

Cyrus Audric Vahdatpour, M.D.

#### **Lung Operations Committee:**

Brittany Fisk Adiletta Shanda Blackmon, M.D. Shawn Groth, M.D. Rebecca S. Grubb Gabriel Loor, M.D. Elsa Lozano Prasad Manian, M.D. Dawn Marshall Marinna Melchor Stephanie Middleton Nicole Jawanmardi Miller Sarah Morrissey, N.P. Holly Church Shilstone **Enrique Serrano** Robert Taylor Ripley, M.D. Ivan O. Rosas, M.D. Nikkie N. Taylor Cyrus Vahdatpour, M.D.





Healthcare



**Research and Innovation** 



**Education** 



### **Community Engagement**

The Baylor College of Medicine Lung Institute divides focus into four pillars of influence; Healthcare/Clinical Practice, Research & Innovation, Education, and Community Engagement.

#### **Lung Institute Leadership Positions and Pillar Champions**



Gabriel Loor, M.D. Healthcare Champion

Cyrus Vahdatpour, M.D. Healthcare Champion

Sarah Morrissey, NP Healthcare Champion



R. Taylor Ripley, M.D. Research and Innovation Champion

Nirmal Sharma, M.D. Research and Innovation Champion



Ramiro Fernandez II. M.D. **Education Champion** 

Philip Alapat, M.D. **Education Champion** 



Farrah Kheramundi, M.D. Community Engagement Champion

Subin Valavil, PA Community Engagement Champion





On Air, a podcast hosted by Dr. Shanda Blackmon, features real patient stories, expert insights, and the latest advancements in thoracic surgery and lung care.

Spotify



Apple



Follow us on X @BCMlunginst



## THE LUNG INSTITUTE (713) 798-5864

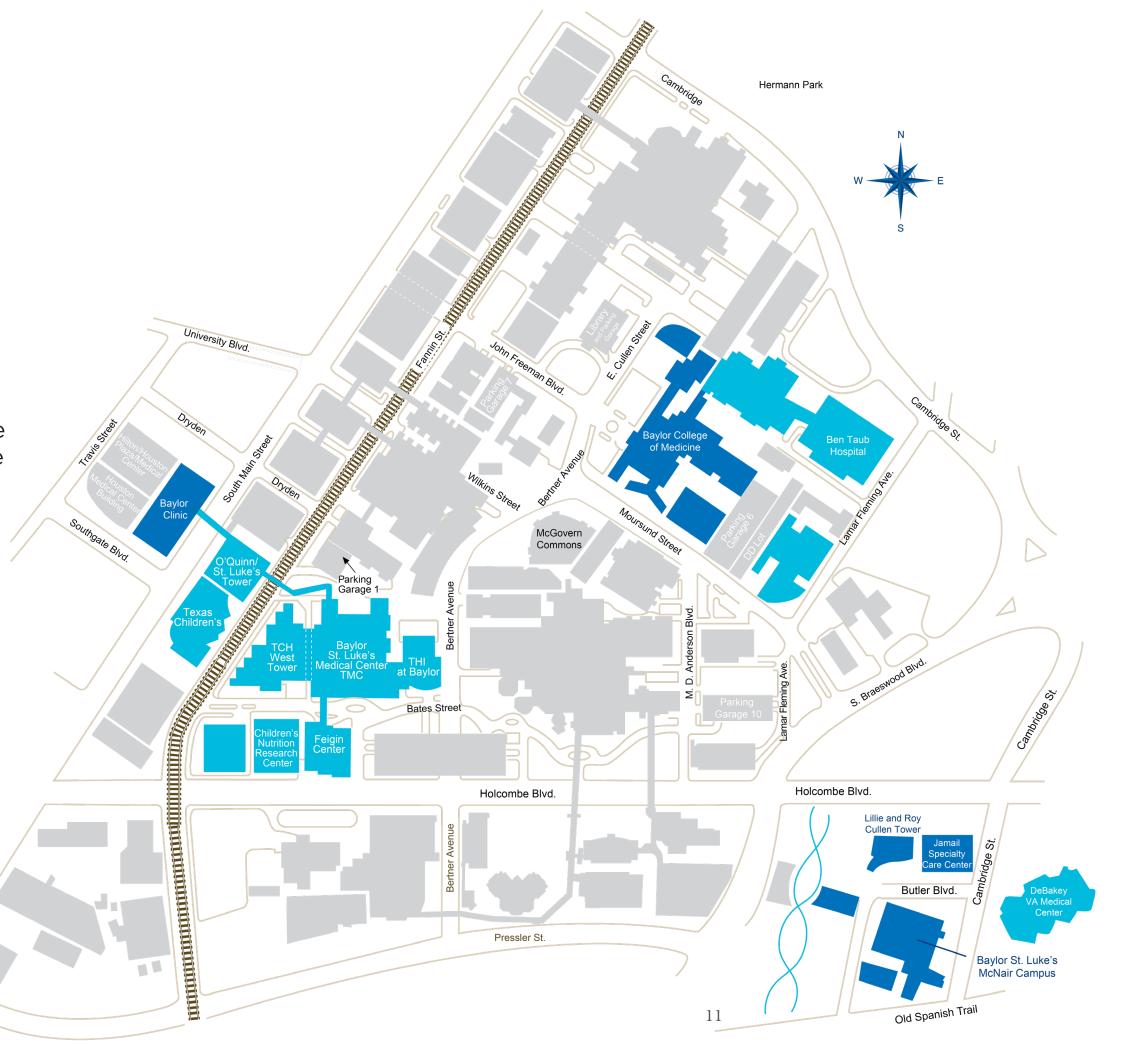
Baylor College of Medicine
Baylor St. Luke's McNair Campus
Baylor St. Luke's Medical Center
Harris Health Ben Taub Hospital
Jamail Specialty Care Center
Lillie & Roy Cullen Health Sciences Tower
Texas Children's Hospital

#### Not Pictured:

Kirby Glenn Center Sugar Land Clinic for Baylor Medicine Woodlands Clinic for Baylor Medicine



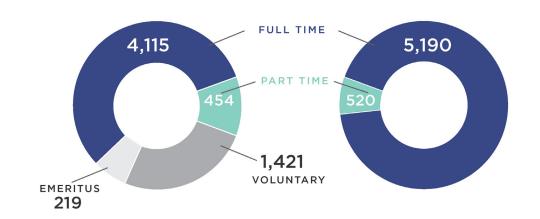




## Baylor College of Medicine

#### **FACULTY**

#### STAFF



#### **TRAINEES**

831 MEDICAL SCHOOL STUDENTS

618 GRADUATE SCHOOL STUDENTS

273 HEALTH PROFESSIONS STUDENTS

1,083 CLINICAL RESIDENTS\*

52

CLINICAL FELLOWS\*

554

POSTDOCTORAL SCHOLARS

18)

TROPICAL
MEDICINE COURSE
PARTICIPANTS\*

\*These numbers are from 2023.

#### ALUMNI\*



9,141

MEDICAL LIVING IN TEXAS 4,672



resident physicians

RESIDENT PHYSICIANS LIVING IN TEXAS 8,834



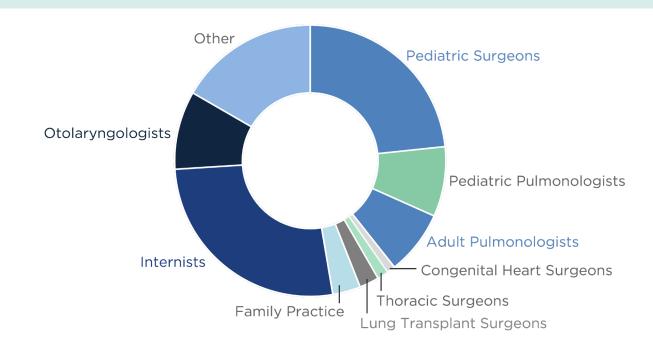
graduate school 2,659



\*These numbers are from 2023.

## The Lung Institute

#### THE LUNG INSTITUTE IS MADE UP OF MORE THAN 300 PHYSICIAN MEMBERS



#### THE LUNG INSTITUTE BY THE NUMBERS

70 Pulmonologists (Adult)

25 Pulmonologists (Pediatric)

**3** Congenital Heart Surgeons

80 Internists (Baylor Medicine)

28 Otolaryngologists (Baylor Medicine)

7 Lung Transplant Surgeons (Baylor St. Luke's )

Pediatric Surgeons (Texas Children's)

Thoracic Surgeons (Baylor St. Luke's )

2 Cardiothoracic Surgeons (Ben Taub Hospital)

Geneticists, Research Physicians,
Medical Oncologists, Radiation Oncology
Specialists, Thoracic-specialized Radiologists,
Interventional Radiologists, Thoracic and
Pulmonary Pathologists

Family Practice Specialists



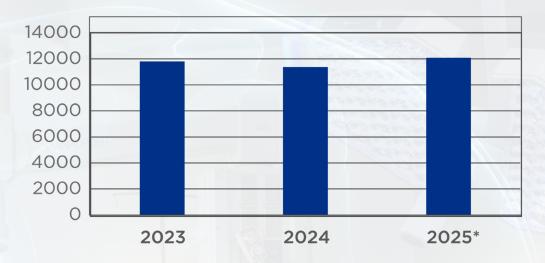
Baylor's private adult practice, Baylor Medicine, includes nationally and internationally recognized physician experts and care teams, offering an array of services from primary care to highly specialized procedures. Our physicians care for patients in locations within the Texas Medical Center as well as other Houston areas.

- Baylor St. Luke's Medical Center
- · Harris Health Ben Taub Hospital
- Central Texas Veterans Healthcare System, Temple, Texas
- The Institute for Rehabilitation and Research (TIRR) Memorial Hermann
- The Menninger Clinic
- Michael E DeBakey Veterans Affairs Medical Center
- Texas Children's Hospital



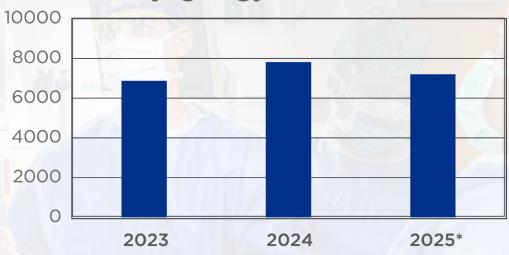
(713) 798-1000

#### **Pulmonology Clinic Volume**



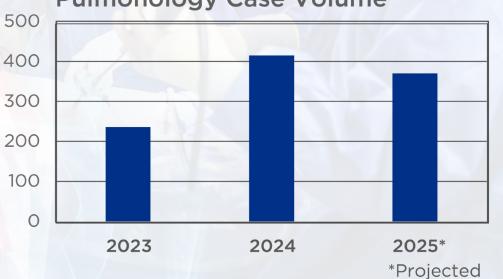
The Section of Pulmonary Medicine continues to see more than 10,000 patients every year in clinic.

## **Otolaryngology Total Volume**



The Department of Otolaryngology continues to see more than 6,000 patients every year.

### Pulmonology Case Volume



Pulmonary medicine specialists provide care in more than seven hospitals across Houston. Within the Baylor St. Luke's Medical Center, the interventional pulmonologists perform more than 300 procedures, including bronchoscopy, endobronchial ultrasound, bronchoscopy, bronchiscopic stenting, and dilations of the airway.



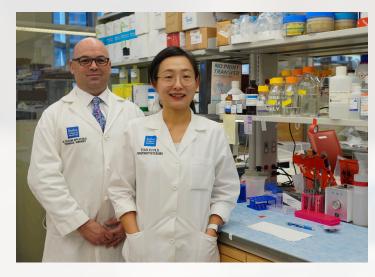
## Research and Innovation

Baylor College of Medicine received \$687 million in total funding from 2,792 sponsored project awards in fiscal year 2023.

The College ranks #20 among all U.S. medical schools for NIH funding and #8 in the nation by the National Science Foundation for research expenditures in biological and biomedical sciences. U.S. News & World Report has named Baylor College of Medicine a Tier 1 medical school for research.

The scale of Baylor's research enterprise, the exceptional caliber of faculty we attract and the richness of biomedical research resources within the Texas Medical Center support creativity innovation and discovery

#### Select Funded Lung Research



The Lung Institute drives innovative research in lung health, fostering discovery and collaboration to develop new interventions that improve patient outcomes worldwide.

Dr. R. Taylor Ripley, professor of surgery and Meyer-DeBakey Chair in Investigative Research, is leading a multi-center clinical trial with Duke University to improve survival for patients with resectable mesothelioma.

The study tests whether combining chemotherapy and immunotherapy before surgery—and continuing immunotherapy for one year after—can extend recurrence-free survival. This trial represents a promising step toward the most effective treatment approach yet for mesothelioma. The Lung Institute sponsors clinical research through support and funding in strategic areas related to lung health.

## IN FUNDING FROM THE NATIONAL INSTITUTES OF HEALTH

#### **BAYLOR RANKS**

20<sup>TH</sup>
IN THE NATION

1ST

**IN TEXAS SINCE 2006** 

8 DEPARTMENTS RANK IN THE TOP 20 IN RESEARCH FUNDING FROM NIH, INCLUDING A #1 RANKING IN GENETICS, WHICH HAS HELD THIS POSITION SINCE 2011.

#### **OUR FACULTY INCLUDES**

- 2 HOWARD HUGHES MEDICAL INSTITUTE INVESTIGATORS
- 5 MEMBERS OF THE NATIONAL ACADEMY OF SCIENCES
- 7 MEMBERS OF THE NATIONAL ACADEMY OF INVENTORS
- 13 MEMBERS OF THE NATIONAL ACADEMY OF MEDICINE
- FELLOWS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
- 21 MEMBERS OF THE ASSOCIATION OF AMERICAN PHYSICIANS
- 61 INDIVIDUALS WITH NIH CAREER DEVELOPMENT AWARDS

## Selected Funded Research Projects within Baylor College of Medicine Related to Pulmonary Science

- 1. Pathophysiology of Vascular Remodeling in Pulmonary Hypertension
- 2. Cell-Based Immunomodulation to Suppress Lung Inflammation and Promote Repair
- 3. Macropinocytosis and Pulmonary Fibrosis
- 4. Multi-omic Investigation of Drivers of Systemic Lupus Erythematosus
- 5. Let-7 microRNA in Lung AT2 Cell Homeostasis and Regeneration
- 6. Cadherin-11 in Development and Treatment of Lung Fibrosis
- 7. Baylor College of Medicine Respiratory Research Training
- 8. Transcriptional Regulatory Knowledgebase of Pulmonary
- 9. Ex Vivo Lung Perfusion Organ Reconditioning
- 10. Porcine Model of Ascaris-Induced Chronic Lung Disease
- 11. Delineating the Role of LET-7 Microrna on Lung AT2 Cell Homeostasis, Alveolar Regeneration, and Interstitial Lung Disease
- 12. Understanding Adherin-11 in the Development and Treatment of Lung Fibrosis
- 13. Eliminating Monitoring Overuse
- 14. Early Life Exposures and Chronic Lung Disease
- 15. Hyperpolarized 129Xe MRI for Lung Function
- 16. Genetic Epidemiology of COPDGENE® 10.0
- 17. Early Life Exposures and Chronic Lung Disease
- 18. Tumor Antigens in Lung Cancer Initiation and Progression
- 19. B Cell Adaptive Immune Profile in A1-AT Deficiency-Associated Emphysema
- 20. Service Agreement with American Cancer Society Biomarker Echo Lung Cancer Project
- 21. Airways Clinical Research Centers (ACRC) Network Databank
- 22. Project Extension: The American Lung Association Lung Health Cohort
- 23. Protective Effects of Metformin Against AT2 Cell Dysmetabolism In COPD
- 24. Competing Continuation: Year 3- SHP2 Inhibits SKP2-Targeted Ubiquitination of TBET in Severe Sarcoidosis
- 25. A Transcriptional Regulatory Knowledgebase of Pulmonary Fibrosis at Single Cell Resolution
- 26. 2025-2026: Care Center Grant; Awardee Id: Cc012-Ad
- 27. Implementation of Outpatient CF Pharmacy Services
- 28. Program for Adult Care Excellence (PACE) Award
- 29. Advancing the Quality of Care for Post-Transplant Cystic Fibrosis Patients
- 30. Extracellular Matrix Characterization of Fibrotic and Non-Diseased Lungs
- 31. Baylor College of Medicine Long-COVID Model System of Care Serving the 29th Congressional District of Texas



- 32. CTSA K12 Program at Baylor College of Medicine and University of Houston
- 33. Collaborative Research Training in Thrombosis and Inflammation
- 34. B Cell-Adaptive Immune Profile in Emphysema-Predominant COPD
- 35. Baylor College of Medicine-Respiratory Research Training
- 36. Mechano-signaling Regulates Macrophage Immunometabolism: Assist 1814293
- 37. Hyperpolarized 129xe MRI to Identify Structural Determinants of Low Lung Function and Respiratory Symptoms in Young Adults From the Lung Health Cohort
- 38. Clinical Genetics and Screening for Pulmonary Fibrosis
- 39. Sineoculis Homeobox Homolog 1 (Six1) in Pulmonary Fibrosis
- 40. Insulin Resistance, Pre-Diabetes, and Diabetes in Obesity-Associated Asthma
- 41. Noradrenergic Mechanisms of Interstitial Pulmonary Fibrosis
- 42. Clinical Validation Center for Lung Cancer Early Detection
- 43. Metformin In Asthma for Overweight and Obese Individuals
- 44. Genetic Epidemiology of Chronic Obstructive Pulmonary Disease (Copdgene 10.0)
- 45. 1/2 Precision Ventilation to Attenuate Ventilation-Induced Lung Injury (Prevent Vili)
- 46. Preparation for Lung Transplant Discussions And Decisions Among People with Cystic Fibrosis
- 47. Repurposing of FDA-Approved Nrf2 Activators as A Novel Inhaled Therapy for Fibrosis
- 48. Exploratory Role of the Cytoskeleton in Anisotropic Regulation of Micrornas in Skeletal Muscles
- 49. Collaborative Research: Mathematical Modeling of Respiratory Muscles
- 50. Collaborative Research: The Interaction of Surfaces Structured at the Nanometer Scale With the Cells in the Physiological Environment.
- 51. Therapeutic Potential Of Targeting Dkk1 In COPD Pathways Grant
- 52. Predictors of De-Novo Development of OSA In Pregnancy



## Education

The Lung Institute is committed to advancing lung health education by equipping learners and healthcare professionals with the knowledge, tools and resources needed to improve care locally and globally.

The Michael E. DeBakey summer students spent time shadowing the thoracic surgery service learning about complex airway and pulmonary disease. They were able to participate in rounds, teaching and discussions.





The Thoracic Surgery Integrated Residency, Thoracic Surgery Fellowship, and Cardiac Transplant Surgery Fellowship training programs graduated four surgeons this year from Baylor College of Medicine. The training program also graduated one advanced fellow who trained with advanced experience in mechanical circulatory support and lung transplantation. This represents just a fraction of the educational programs that are offered from Baylor College of Medicine.

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## **EDUCATION** -

#### Baylor College of Medicine educates healthcare providers and scientists in programs considered among the elite in the world.

Degree programs at Baylor include:

- M.D. program
- Dual degree programs (M.D. plus Ph.D., M.B.A., M.P.H., J.D. or M.S.)
- Ph.D. programs
- A doctoral program in nurse anesthesia
- A physician assistant program
- An orthotics and prosthetics program
- A genetic counseling program

A diploma course in tropical medicine prepares individuals interested in this growing field for certification.



One of the residents in the current thoracic surgery training track, Christopher Strader, M.D., MPH, prepares to dock the robot for advanced surgical training.



## **Community Engagement**

Baylor College of Medicine partners with local leaders to serve the communities of Houston and the world through:

Innovative health care delivery models such as

Baylor global health

Baylor global initiatives

Health care for the homeless

Houston shoulder to shoulder

Community health clinics

School based clinics

Teen health clinics

Research designed to develop new approaches to prevention diagnosis and treatment that fulfill specific community needs including

- Center for Medical Ethics and Health Policy
- Center for Precision Environmental Health
- Children's Nutrition Research Center
- The Dan L Duncan Institute for Clinical and Translational Research
- National School of Tropical Medicine
- Office of Outreach and Health Disparities of the Dan L Duncan Comprehensive Cancer Center
- Undiagnosed disease network

Education outreach programs that help every student to achieve their full potential including

- 3 middle schools and 9 high schools
- 4 BS/MD programs
- Bio Ed online
- Teacher professional development programs
- Programs designed to promote diversity in medicine and biomedical research
- GRAB (Grocery Resource at Baylor), a food pantry for Baylor students

The Baylor College of Medicine Lung Institute was proud to sponsor multiple surgical and medical society meetings over the past year. Our focus remains on engaging academic partners and fostering collaboration. By maintaining a strong presence at national and regional meetings, the Lung Institute connects providers with leading scientific communities and advances multidisciplinary research and interventions.

Brittany Fisk, Dr. Gabriel Loor and Dr. Shanda Blackmon attended the Southern Thoracic Surgical Association meeting and KOPPA Conference (named after Thaddeus M. Koppa, a pulmonologist) this past year. We will be representing the BCM Lung Institute at the annual CHEST Conference this October in Chicago.

During Lung Cancer Awareness Month in November, Dawn Marshall and the Lung Institute team engaged the hospital community with vital education, reflecting our deep commitment to raising awareness and improving lung health.



Dr. Shanda Blackmon traveled to Nigeria in February to speak at the African Cardiothoracic Surgical Conference (ACTSCON) and support thoracic surgeons in accessing essential educational resources. Following this, Dr. Chizoba Efobi and colleagues visited Houston to further the collaboration and gain insights into lung surgery programs and interventions.





Baylor College of Medicine was a proud Sponsor of the American Lung Association Lung Force Walk and Stair Climb

On May 17, 2025, members of the Baylor College of Medicine Lung Institute Team Climbed the Stairs of the Rice Stadium to raise money and awareness for patients suffering from lung disease.



Dr. Shanda Blackmon joined leaders from Baylor St. Luke's Medical Center to celebrate heart health at a luncheon sponsored by the American Heart Association. During the luncheon, funds were raised to help raise awareness and help women suffering from heart disease. As the heart and lung associations work closely together, collaboration between AHA and ALA is essential for impact.

#### **Support from the Community**



Philanthropy plays a critical role in Baylor College of Medicine's quest to accelerate research programs and to bolster the activities of our educators, our learners and our ability to provide leading-edge patient care for our Houston and other communities. In 2023, supported by an engaged Board of Trustees and Board of Advisors, a global network of alumni and volunteers, Baylor received more than 6,900 gifts and raised more than \$113 million in new gifts and commitments.

The Baylor College of Medicine Lung Institute is supported by many grateful patients and donors within our community. These funds, grants and support from the college enable the Institute to bring scientific investigators together and benefit our community of learners, investigators and patients.

A gift from the Lester & Sue Smith was used to establish the Thoracic Surgery Clinic, which is located on the 6th floor of the new Baylor McNair Campus offices. This fund was also used to facilitate many of the initiatives for the Lung Institute.

## Make a Gift

Your gift to the Lung Institute will help pioneer new procedures and technologies, advance medical research, improve the quality of patient care and train the next generation of surgeons, educators and innovators. Thank you for your generosity.



# Advanced Lung Support Program ARDS, ECMO & Critical Care



Subhasis Chatterjee, M.D. Associate Professor Division of Trauma and Acute Care Surgery Division of Cardiothoracic Surgery

Director, Thoracic Surgical ICU & ECMO Program Baylor St. Luke's Medical Center



Our ECMO Program brings together a multidisciplinary team of more than 30 physicians—including cardiothoracic surgeons, interventional cardiologists and intensivists—who work in close collaboration with nurses, perfusionists, physical therapists and advanced practice providers to optimize outcomes for patients requiring extracorporeal life support.

We utilize ECMO as a bridge to recovery or to definitive therapies such as organ transplantation or durable mechanical circulatory support. Our team is actively engaged in clinical trials, regularly publishes in peer-reviewed journals, and shares its expertise at national and international conferences. We are also committed to training the next generation of physicians in advanced ECMO management.

BSLMC has consistently increased the number of patients supported with ECMO (ExtraCorporeal Membrane Oxygenation). This form of lung support is available to patients when a traditional ventilator may not be enough. During 2024, over 200 patients were supported with this technology. That number is projected to increase even more for 2025.



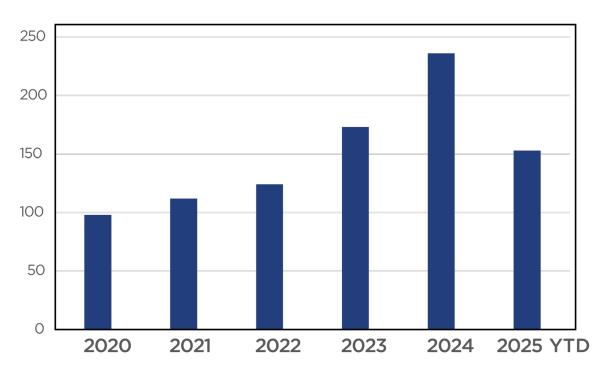
Our Advances in Critical Care conference features speakers from the Texas Medical Center and around the country discussing all aspects of critical care.

Join us for cutting-edge discussions on extracorporeal membrane oxygenation (ECMO), mechanical circulatory support, and neuromonitoring. Breakout sessions will focus on ICU systems, team dynamics, and much more.

advancesincriticalcare.org

The Advances in Critical Care meeting will next take place in 2026.

#### ECMO case volume - Baylor St. Luke's Medical Center



Baylor St. Luke's Medical Center has consistently increased the number of patients supported with ECMO (ExtraCorporeal Membrane Oxygenation). This form of lung support is available to patients when a traditional ventilator may not be enough. During 2024, over 200 patients were supported with this technology. That number is projected to increase even more for 2025.

#### Patients managed by ventilator - Baylor St. Luke's Medical Center

	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Cases	2,699	2,519	2,414	2,607	2,635	2,719
Days on Ventilator	16,519	19,017	17,494	17,306	17,659	17,947

Baylor St. Luke's Medical Center consistently manages some of the most complex patients in the medical center and maintains consistent high volume both in the number of patients supported by a ventilator and in the numbers of days on a ventilator.

## Airway Disease Program



Nicola Alexander Hanania, M.D., M.S. Professor, Medicine-Pulmonary Director, Airways Clinical Research Center Baylor College of Medicine

Chief, Pulmonary/Critical Care/Sleep Medicine Ben Taub Hospital

"My ultimate goal is to improve the outcome of patients with asthma and COPD not only by providing state of the art evidence-based care, but by developing and testing new interventions to eliminate burden of these diseases."

The Baylor Medicine Airway Disease Program provides comprehensive services for all patients with asthma and chronic obstructive pulmonary disease (COPD). We offer the full spectrum of conventional and advanced therapies for patients through compassionate patient-centered care, education and self-empowerment. We partner with allergy and immunology, otolaryngology, interventional pulmonology and thoracic surgery experts to ensure patients have a treatment plan that considers all aspects of their condition.

- Severe and steroid-dependent asthma
- · Allergic and eosinophilic asthma
- Non-allergic asthma
- Asthma in high-risk groups, including pregnancy
- Aspirin-exacerbated respiratory disease
- Allergic bronchopulmonary aspergillosis
- Advanced chronic obstructive pulmonary disease (COPD)
- Chronic bronchitis and emphysema
- Chronic cough



#### Research:

The Airway Disease Program is one of the sites of the Baylor Airways Clinical Research Center (ACRC). Patients participate in clinical studies which are advancing how we treat asthma and COPD.



Baylor Medicine at McNair Campus 7200 Cambridge St. Suite 8A Houston, TX 77030 Fax: (713) 873-3346 (713) 798-2400

## Airways Clinical Research Center



The ACRC Network is a jewel in the crown of the American Lung Association research program. As the nation's largest not-for-profit network of clinical centers dedicated to asthma and COPD research, it includes an impressive bandwidth of experts working together to produce results directly affecting patient care. The ACRC Network positively impacts patients through large patient-focused clinical trials led by some of the best investigators nationwide.

The local Airways Clinical Research Center at Baylor College of Medicine is part of Asthma Clinical Research Centers, a nationwide clinical network created by the American Lung Association and is the only center in Texas. The principal investigator of the Baylor ACRC is Nicola A. Hanania, M.D., of the pulmonary section of the Department of Medicine. The coprincipal investigator is Marianna M. Sockrider, M.D., Dr.PH, of the pediatric pulmonology section of the Department of Pediatrics. The center includes several other investigators from Baylor St. Luke's Medical Center, Houston Methodist Hospital, Ben Taub Hospital and Texas Children's Hospital and is part of the Biology of Inflammation Center.

## Advanced Lung Disease Clinic



Ivan O. Rosas, M.D.
Professor and Chief
Section of Pulmonary, Critical Care & Sleep Medicine
Department of Medicine

"I am interested in the development of novel diagnostic and therapeutic approaches to treat disabling lung diseases. Our clinical research focuses on early detection and treatment of pulmonary fibrosis."

The Advanced Lung Disease Clinic provides cutting-edge care for a wide range of progressive lung diseases that require specialized treatments, including but not limited to lung transplantation. Sub specialists provide multidisciplinary care under one roof, focusing on patient-centered approaches to diagnose and treat progressive lung diseases. We specialize in treating common disorders, as well as rare genetic pulmonary disorders like Hermansky-Pudlak Syndrome, lymphangioleiomyomatosis (LAM) or alpha-1-antitrypsin deficiency, which can also be associated with progressive decline in lung function.

- Interstitial lung disease
- Pulmonary fibrosis
- Sarcoidosis
- Connective tissue diseases
- Autoimmune lung diseases
- Chronic Obstructive Pulmonary Disease (COPD)
- Emphysema
- Pulmonary hypertension
- Hermansky-Pudlak syndrome
- Langerhans cell histiocytosis
- Lymphangioleiomyomatosis (LAM)
- Birt hogg dube syndrome
- Alpha-1-antitrypsin deficiency



Our center also provides access to clinical trials and observational studies to improve our knowledge of lung disease and facilitate access to novel therapies that could prove beneficial.



Baylor St. Luke's Medical Center 6620 Main St. Suite 1475 Houston, TX (832) 355-2285

## Bronchiectasis

## Cystic Fibrosis Center, Non-CF Bronchiectasis



Tara Lynn Barto, M.D., MSCR
Assistant Professor
Director, Baylor Adult Cystic Fibrosis Program
Section of Pulmonary, Critical Care & Sleep Medicine
Department of Medicine

"I strive to provide state of the art, compassionate, comprehensive, care to the adult cystic fibrosis community as well as those with complex pulmonary diseases including non-cystic fibrosis bronchiectasis."

As Houston's only Cystic Fibrosis Foundation accredited adult care center, The Baylor Medicine Maconda Brown O'Connor, Ph.D., Adult Cystic Fibrosis Center is one of the largest in the United States and provides clinical care to the patients 18 years and older with cystic fibrosis in a multidisciplinary manner including providers, nursing, nutrition support, social services and respiratory therapy focused on this disease process. Additionally, we offer opportunities to participate in clinical trials ranging from observational to interventional (Phase I-IV) options.

#### Baylor Medicine | cysticfibrosis@bcm.edu | 713-798-2400

The Bronchiectasis Program at Baylor Medicine offers advanced diagnostics and management of bronchiectasis and its complications. Our team of lung specialists will review a patient's case and develop a personalized treatment plan, which may include:

- Evidence-based lifestyle changes
- Inhaled and mechanical airway clearance treatments
- Inhaled antibiotics
- Oral or intravenous antibiotics for when patient gets sick from infections, including pseudomonas, mycobacteria, MRSA, etc.
- Oxygen prescription
- Genetic testing and counseling for diseases like primary ciliary dyskinesia (PCD)
- Combined visits with infectious disease specialists for complicated cases
- Referral to a surgical specialist
- Referral to pulmonary rehabilitation to improve symptoms and mobility

# Center for Dysphagia and Swallowing Disorders

### Aspiration, Dysphagia, Swallowing and Reflux

The Center for Dysphagia and Swallowing Disorders is an unparalleled collaboration between three unique specialties with dedicated interests in dysphagia. With a team of otolaryngologists, thoracic surgeons, gastroenterologists, radiologists, speech therapists and nutritionists, we evaluate and treat patients who have difficulty swallowing food or liquids. A commitment to research, advancing medical education and measurement of outcomes allows us to bring best-practice and state-of-the-art technologies to our patients.

The center strives to establish a diagnosis quickly and we work carefully with each patient to establish an individualized treatment plan.

#### Baylor Medicine | (713)798-8376 or (713)798-LUNG

- Botulinum toxin (Botox) injection
- Cricopharyngeal myotomy (endoscopic/ open)
- Laparoscopic heller myotomy
- Laparoscopic hiatal hernia repair and Nissen fundoplication
- Laparoscopic paraesophageal hernia repair
- LINX procedure for GERD
- Speech and swallowing therapy
- Vocal injection/medialization
- Zenker's diverticulostomy (endoscopic/ open)
- Neurology consultation
- Psychiatry consultation
- Feeding tube placement
- Nutrition consultation
- Esophageal dilation
- Esophageal stent placement
- Photodynamic therapy
- Esophagectomy
- Minimally invasive esophagectomy
- Radiofrequency ablation of Barrett's esophagus
- Peroral endoscopic myotomy (POEM)

- Pharyngeal dysfunction
- Aspiration
- Cricopharvngeal bar
- Cricopharyngeal dysfunction
- Vocal paralysis
- Esophageal dysmotility
- Achalasia
- Dermatomyositis
- Esophagitis
- Esophagogastric junction (EGJ) outflow obstruction
- Hypercontractile esophagus (jackhammer esophagus)
- · Ineffective esophageal motility
- Scleroderma
- Reflux
- Gastroesophageal reflux disease
- Hiatal hernias
- Laryngoesophageal reflux
- Paraesophageal hernias
- Barrett's esophagus
- Esophageal cancer
- Esophageal diverticuli
- Esophageal strictures
- Zenker's diverticuli

## Center for Airway, Voice and Swallowing Upper Airway & Tracheal Disease



Julina Ongkasuwan, M.D.
Professor and Chief, Laryngology
Otolaryngology - Head & Neck Surgery



"I am interested in how we produce voice and different treatment approaches for voice problems. I specialize in perceptual evaluations of voice problems, examination of patients with voice problems, including stroboscopic examination of the voice box."

The Laryngology and Speech Pathology team at Baylor Medicine is dedicated to the care of patients with voice, airway and swallowing disorders. We employ advanced medical, surgical and behavioral approaches to diagnose

and treat a wide range of conditions, including dysphagia (difficulty swallowing), voice disorders and airway obstruction resulting from laryngeal, subglottic or tracheal stenosis. Our team works in close multidisciplinary collaboration with experts in pulmonology, thoracic surgery, endocrine surgery, gastroenterology, neurology and oncology to ensure comprehensive, patient-centered care.

#### Baylor Medicine | 1977 Butler Boulevard | 713-798-5900

- Voice problems
- Hoarseness
- Dysphagia
- Muscle tension dysphonia
- Glottic stenosis & subglottic stenosis
- Laryngopharyngeal reflux
- Muscle tension dysphonia
- Spasmodic dysphonia
- Paradoxical vocal fold movement
- Recurrent laryngitis
- In-office vocal fold augmentation and therapeutic injections

- Recurrent respiratory papillomatosis
- Chronic cough
- Early-stage laryngeal cancer
- Vocal cord dysfunction
- Vocal misuse and overuse
- Vocal fold/cord paralysis, nodules, polyps and other benign lesions
- Reinke's edema
- Tracheal stenosis
- Tracheostomy management
- Zenker's diverticulum
- Age-related vocal fold atrophy

In addition to surgical and medical treatment, patients with airway, voice and swallowing conditions are often referred to a speech-language pathologist, who can provide additional evaluation and treatment options.

- Voice and swallow therapy
- Professional voice care/singing voice rehabilitation
- Head and neck cancer rehabilitation
- Modified barium swallow study (MBS) and flexible endoscopic evaluation of swallowing (FEES)
- Lee Silverman Voice Therapy (LSVT)

# Congenital Tracheal & Lung Disease Intervention for Children

Pediatric Lung Transplant



Jeffrey S. Heinle, M.D.
Professor and Chief
Division of Congenital Heart Surgery

Surgical Director, Lung Transplant Program Texas Children's Hospital

"I focus on delivering children born with congenital lung disease the best possible future with the latest advances in technology."

The Texas Children's Hospital (Texas Children's) Lung Transplant Program ranks among the largest pediatric transplant programs globally and leads nationwide in performing pediatric lung transplants. In fact, over the past five years, under the leadership of Tina Melicoff, M.D., medical director of Texas Children's Lung Transplant Program, we have executed more than a quarter of all pediatric lung transplants in the United States.

Our nationally ranked specialist team has the experience and expertise to handle the most complex and rare cases. Skilled cardiothoracic surgeons, trained specifically in lung transplants, offer detailed surgical consultation. Teams include pulmonologists, nurse coordinators, dietitians, pharmacists, social workers, child life specialists, psychologist, physical and occupational therapists. Each of these disciplines provides comprehensive education in their area of expertise to facilitate a successful transplant.

Texas Children's is a globally recognized leader in extracorporeal membrane oxygenation (ECMO) care. ECMO provides life-prolonging care to critically ill patients until a suitable lung donor becomes available. Our extensive experience in ECMO as a bridge to transplant allows us to offer a lifeline to the most critical patients who might otherwise be ineligible for transplantation.

- Fetal lung problems
- Lung transplant
- Tracheal surgery
- Vascular slings and rings

- Tracheobronchoplasty
- Pleural disease
- CCAM (congenital cystic adenomatous malformation)



Ernestina Melicoff-Portillo M.D. Assistant Professor of Pediatrics Division of Pediatric Pulmonology Baylor College of Medicine

Medical Director, Lung Transplant Program Texas Children's Hospital

"The team at Texas Children's Hospital delivers multidisciplinary expert care at every step along a patient's journey from early lung disease to advanced lung transplantation. As one of the leading pediatric lung transplant programs in the country, we focus on delivering integrated and quality-focused care."

### Leading the Nation and the World

Texas Children's Hospital stands at the forefront of pediatric respiratory and circulatory care, notably through its Lung Transplant Program—one of the largest in the world—and its nationally recognized Pulmonary Hypertension Program. The lung transplant team delivers multidisciplinary expert care at every step along a patient's journey from early lung disease to advanced lung transplantation. As one of the leading pediatric programs in the country, we focus on delivering comprehensive and family-centered care.

#### **Program Highlights**

- Largest pediatric lung transplant program in the country
- Supports a pediatric population from infancy through young adulthood
- 20 years of extensive experience in pediatric lung transplantation
- Dedicated specialty teams collaborate to ensure comprehensive care
- Extracorporeal membrane oxygenation as a bridge to lung transplantation

## **Endometriosis Center**

#### Pleural Endometriosis



Xiaoming Guan, M.D., Ph.D. **Professor and Chief** Division of Minimally Invasive Gynecologic Surgery **Obstetrics and Gynecology** 

Baylor Medicine endometriosis specialists have long been recognized for their expertise in diagnosing and treating endometriosis, providing much-needed relief for women searching for help.

Treatment is provided by board-certified, fellowshiptrained minimally invasive gynecologic surgeons highly skilled in excision surgery. These experienced surgeons work in concert with a diverse team of Baylor Medicine specialties to treat all aspects of a woman's health affected by endometriosis.

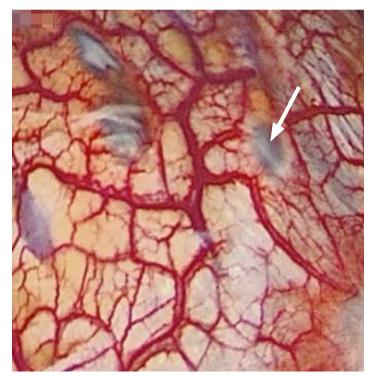
#### Texas Children's Pavilion for Women | (832)-826-7500

Dr. Xiaoming Guan, M.D., Ph.D., is a nationally recognized leader in minimally invasive gynecologic surgery and a pioneer in advanced robotic-assisted techniques. He is a leading expert in endometriosis surgery, with a clinical focus on advanced robotic and minimally invasive approaches to complex cases. He is the advisor of Endometriosis Foundation of Houston(EFHou) and the T shirt with "Guan Gang" was honored in this foundation.

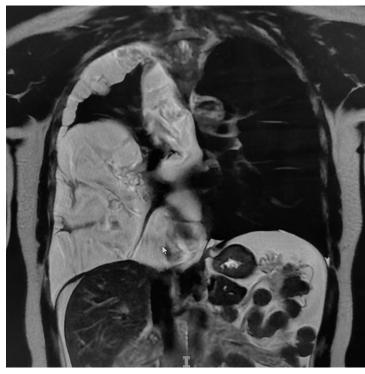
Dr. Guan has performed over 1,800 robotic surgeries and more than 1,500 endometriosis excision procedures, including some of the most complex cases involving the bowel, ureter, pelvic nerves, diaphragm, pleura and other extrapelvic sites.

A trailblazer in surgical innovation, Dr. Guan is the highest-volume surgeon for uniportal robotic surgery, encompassing both transumbilical and transvaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES). He is also the first MIGS surgeon to perform all stages of pelvic endometriosis surgery exclusively through robotic vNOTES.

Since 2021, Dr. Guan has expanded the endometriosis program by recruiting three additional MIGS surgeons—Dr. Joseph Nassif, Dr. Tamisa Koythong and Dr. Brooke Thigpen—who also specialize in complex endometriosis care. Through their MIGS fellowship program, the team has trained 12 skilled endometriosis surgeons, now practicing across the United States and contributing to the advancement of gynecologic surgery through clinical excellence, research and mentorship.



team to surgically evaluate and eliminate pleural endometriosis. endometriosis within the chest (white arrow).



With a video camera in the chest, Dr. Shanda Magnetic Resonance Imaging demonstrates Blackmon works alongside Dr. Guan and his blood in the chest of a patient suffering from



Endometriosis and the lesser-known thoracic endometriosis syndrome



# Chest Wall Resection and Reconstruction



Sebastian Winocour, M.D., MBA
Professor and Associate Chief
Division of Plastic Surgery
Baylor College of Medicine
Section Chief of Plastic Surgery
Baylor St. Luke's Medical Center



Marco Maricevich, M.D. Associate Professor Chief, Plastic Surgery Ben Taub Hospital

The Chest Wall Resection and Reconstruction Clinic focuses on tumors of the chest wall and deformity of the chest wall from trauma or congenital defects. Our teams specialize in analyzing chest wall images from CT scans or MRI to diagnose characteristics that can lessen the need for biopsy. When a biopsy is warranted, we work closely with oncology colleagues and the multidisciplinary tumor board to ensure patients are appropriately treated for chest wall tumors.

- Chest wall tumors
- Pectus excavatum
- Pectus carinatum

- Chest wall trauma
- Chest wall hernias

#### Baylor Medicine | (713)798-8376 or (713)798-LUNG



#### Research:

Our teams are currently working with industry partners to create customized 3D printed chest wall reconstructions with material uniquely suited to function like human ribs. Our collective experience and systematic approach made innovation in this area a key area of innovation interest. Research protocols and collaboration with the FDA enable our programs to measure results and improve outcomes.

## Family Medicine



Baylor Medicine family physicians provide primary care to individuals and the entire family—from adolescents to older adults. The clinics offer lung cancer screening and smoking cessation services to underserved and high-risk areas in Texas, including Polk and San Jacinto Counties. Building on the Harris County Healthy Lung Cancer Screening Program, the new Lung Cancer Screening and Tobacco Control (LCTC) Network will train 250 primary care providers, offer 450 free screenings and provide smoking cessation treatment to 3,000 patients. The program aims to reach 20,000 community members and reduce lung cancer mortality by 20%.

#### Baylor Medicine | 713-798-7700

Extended hours, next-day appointments, telehealth visits, virtual Saturday visits and three convenient locations make it quicker and easier to get the care patients need. Our physicians speak several languages, providing options to Houston's diverse community.

## Lung Cancer Screening locations

Harris Health Ben Taub Hospital (713) 526-4243

Michael E. DeBakey VA Medical Center (800) 698-2411

Baylor College of Medicine Concierge Healthcare Program (713)798-7877 or fax (713)798-1830 Baylor St Luke's Medical Center (832) 354-1000

Dan L Duncan Comprehensive Cancer Center One of only three NCI Designated Cancer Centers in Texas. (832) 957-6500

The Duncan Cancer Center is designated by the National Cancer Institute.

## Fungal Disease and Sinusitis Clinics



David B. Corry, M.D.

Professor of Medicine-Immunology,
Allergy and Rheumatology
Fulbright Endowed Chair in Pathology
Baylor College of Medicine

"I have spent my career studying the relationships between allergic fungal sinusitis and allergic lung disease to determine the best ways to detect, treat and montior allergic airway inflammation."

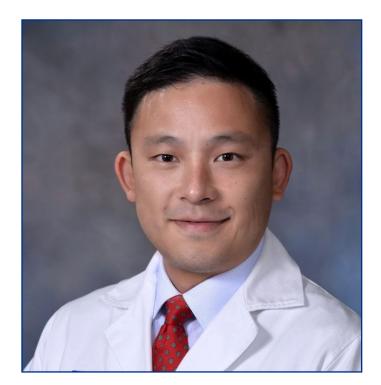
(713)798-8740



Dr. Corry's laboratory focuses on unraveling the molecular pathways that drive lung and sinus inflammation through the study of humans and experimental models. Key discoveries include defining the fungal infectious basis of asthma and sinusitis and the roles that the inflammatory protein interleukin 13, platelets, and clotting factors play in driving fungus-dependent inflammation.

The team further studies how genetic mutations drive susceptibility to fungal airway infections.

Working with other BCM allergists, Dr. Corry has developed protocols for the safe use of currently available antifungals and anti-inflammatory agents in fungal asthma and sinusitis. The laboratory is further developing novel anti-inflammatory and antifungal drugs for use in these conditions.



Evan Li, M.D.

Assistant Professor of Medicine
Immunology, Allergy & Rheumatology
Baylor College of Medicine

"My research in fungal sinusitis and mucoobstructive airway disease focuses on identifying pathways and signaling mechanisms which contribute to airway obstruction. My patients are often pleased to see how the work I am doing in the lab translates into clinical practice. The knowledge we acquire helps us to better understand how to manage and monitor their disease. The Lung Institute is a perfect arena for building bridges with other researchers, getting support, disseminating what we have learned and building stronger programs."

#### (713)798-2344

Allergic diseases are often seen as misguided immune responses that cause more harm than benefit. However, new research led by an international team at Baylor College of Medicine reveals that certain allergic reactions play a vital role in protecting against highly invasive and potentially deadly infections, such as those caused by yeast.





## Interventional Pulmonology



Javeryah Safi, M.D. Assistant Professor Interventional Pulmonary Section of Pulmonary and Critical Care Medicine

"I strive to deliver the least invasive and most personalized diagnostic and therapeutic interventions. As a pulmonologist, seek to get my patients staged and treated in the safest and most timely manner. Our teams strive to deliver an exceptional experience."

#### Baylor Medicine | 7200 Cambridge St., Suite 6A | (713) 798-2678



Babith Mankidy, M.D.
Assistant Professor
Interventional Pulmonary
Section of Pulmonary and Critical Care Medicine

"I provide interventional pulmonary input to the lung transplant service at Baylor St. Luke's Medical Center and my dual experience in transplant medicine and interventional pulmonary gives me added ability to tackle complex post transplant airway concerns."

The Interventional Pulmonology Program is one of the largest lung centers in Texas that provides interventional pulmonology. As part of our comprehensive lung program, our board-certified interventional pulmonologists perform advanced diagnostic bronchoscopy, pleural procedures and therapeutic bronchoscopy. We offer consultation services for both malignant and benign disorders of the lung and the airways and a multidisciplinary approach to evaluation and management.

- Lung cancer
- Lung nodules
- Airway obstruction due to cancer
- Hemoptysis
- Tracheal stenosis
- Pneumothorax

- Pleural effusions
- Emphysema and COPD for valve placement
- Prolonged air leaks after surgery
- Pulmonary alveolar proteinosis



#### IP Procedures and Technology:

#### **Advanced Diagnostic Bronchoscopy**

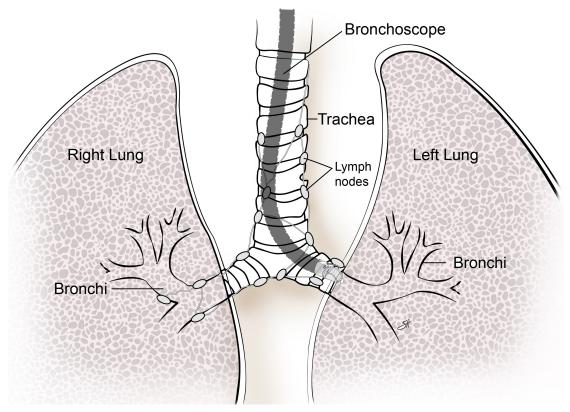
- Endobronchial Ultrasound (EBUS)guided transbronchal needle aspiration
- Electromagnetic navigational bronchoscopy
- Robotic bronchoscopy and biopsy
- Radial endobronchial ultrasound
- Transbronchial cryobiopsy

#### **Pleural Procedures:**

- Pleural ultrasound
- Thoracentesis
- Tunneled indwelling pleural catheter placement
- Pleurodesis

#### **Therapeutic Bronchoscopy**

- Rigid bronchoscopy
- Laser and Argon plasma coagulation
- Electrocautery/electrosurgery
- Microdebirder
- Endobronchial cryotherapy
- Airway stent placement
- · Foreign body removal
- Balloon dilation
- Endobronchial valve placement for persistent air leaks
- Bronchoscopic lung volume reduction for COPD (chronic Obstructive Pulmonary Disease)
- Bronchial thermoplasty for asthma
- Tracheostomy management
- Whole lung lavage
- Fiducial placement for radiation therapy



## Lung Cancer Screening

Michael E. DeBakey VA Medical Center



#### Farrah Kheradmand, M.D.

Professor of Medicine,
Director of BCM Lung Cancer Screening Program
Nancy Chang, Ph.D. Endowed Professorship
Biology of Inflammation Center
Baylor College of Medicine
Co-Lead for Tumor Biology Program
Dan L Duncan Comprehensive Cancer Center
Co-Director of the Lung Precision Oncology Program
MEDVAMC

"I am interested in detecting lung cancer in the earliest stages of disease when we still have a chance for cure. My research is related to smoking-related lung diseases and the molecular mechanisms of lung cancer development."



Lorraine Cornwell, M.D.
Associate Professor of Surgery
Baylor College of Medicine
Section Head of General Thoracic Surgery
Michael E. DeBakey VA Medical Center

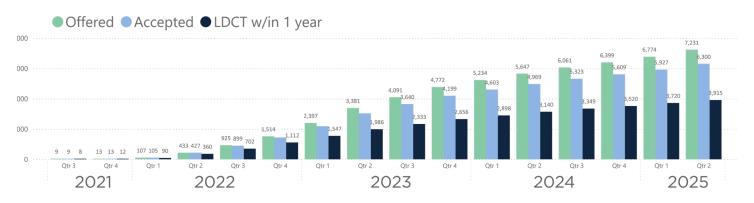
"As the section head for general thoracic surgery and coinvestigator for the lung cancer screening program, I am dedicated to detecting lung cancer at the earliest stage. When lung cancer is detected early, surgeons can often offer curative surgery."

Lung Precision Oncology Program (LPOP) hub at the Michael E. DeBakey VA Medical Center (MEDVAMC) was funded in 2021 with the mission to improve the lives of veterans with cancer through early detection and precision medicine. The MEDVAMC LPOP mission closely follows the VA vision in providing the best-in-class lung cancer care through an integrated oncology systems of excellence using the Hub and Spokes model. Drs. Kheradmand and Cornwell have successfully implemented multiple goals as evidenced by their compliance with performance metrics including initiating lung cancer clinical trials, lung cancer screening programs (LCSP), expanding LCSP Spoke sites, and performing molecular testing when appropriate in new lung cancer cases. Together, these new initiatives and expansions have improved Veteran access to care and precision oncology trials. The infrastructure support from LPOP, extramural, and private fundings, the MEDVAMC LPOP has expand the lung cancer clinical and research programs through the following Aims:

- · Clinical program in early detection of lung cancer
- Precision oncology lung cancer clinical trials

Dr. Selve Bijarski is the piling in lung cancer Screening Director.

#### Cumulative Total of Patients Offered and Accepting Lung Cancer Screening, and Eligible at Time of Assessment

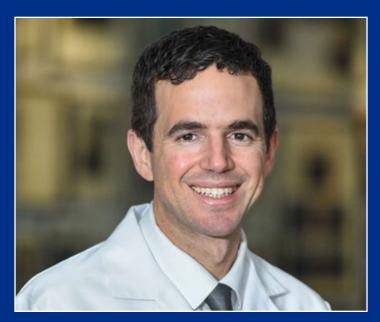


The Michael E DeBakey Veterans Affairs Medical Center (MEDVAMC) Milestones: Cumulative total of veterans offered and accepted lung cancer screening, who were eligible at time of assessment per quarter. Data acquired from the Lung Precision Oncology Program (LPOP) dashboard demonstrate a steady growth of the Lung Cancer Screening Program (LCSP) that ensured enrollment of eligible veterans engaged in the screening program at MEDVAMC. B) Since the second quarter in FY 2022, the program has identified over 7,200 veterans who qualify for lung cancer screening. Over 6,200 have been offered low-dose CT screening scans and over 3,800 have completed scans.



Michael E. DeBakey VA Medical Center 2002 Holcombe Boulevard Houston, TX

## Lung Transplant Program



Gabriel Loor, M.D.
Associate Professor of Surgery
Baylor College of Medicine

Surgical Director, Lung Transplant Program Baylor St. Luke's Medical Center

Dr. Gabriel Loor, along with his collaborators Yaxin Wang, Ph.D., and Chris Chan, Ph.D., led Organvive to won the prestigious Shark Tank competition in March 2025, securing seed funding and comprehensive branding support to advance their innovative lung repair platform, NOBEL. This ex vivo technology uses cold perfusion with blood and nutrients combined with natural-like ventilation to preserve and repair donor lungs for up to 48 hours—twice the duration of existing methods—while enabling targeted therapeutic delivery to rescue damaged lungs and expand the donor pool.

lungtransplant@stlukeshealth.org | (832) 355-9125

The Lung Transplant Program at Baylor St. Luke's Medical Center is a national leader in advanced lung disease and offers a variety of options for patients in need of a lung transplant.

The program is designated as a transplant center of excellence by Optum/United Healthcare and members of the team are pioneers of various innovations including the use of portable ex vivo lung perfusion for transportation and evaluation of donor organs. >100 lung transplants (#6 in the nation by volume)

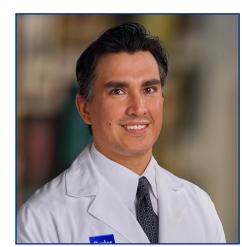
- Single and double lung transplantation
- Multi organ transplants
- Ex vivo lung perfusion
- Transplantation in patients with extended risk, such as coronary artery disease
- Anti-rejection strategies



Nirmal Sharma, M.D.

Medical Director, Lung Transplant Center
Baylor St. Luke's Medical Center

"I am excited to join the Baylor College of Medicine team and lead the lung transplant program. The research and collaboration happening within the Lung Institute is known across the nation and is one of the key programs that recruited me to come back to Houston."



Erik Eddie Suarez, M.D. Associate Professor Division of Cardiothoracic Transplantation and Circulatory Support Baylor College of Medicine

Director of Cardiothoracic Transplantation Baylor St. Luke's Medical Center

"As someone who trained at the Texas Heart Institute, I have always known the value of bringing like-minded practitioners together to build strong clinical programs. Baylor College of Medicine Lung Institute represents one of the largest consortiums of lung-based care in the Nation. I cannot wait to be a part of it."



Determined patient alive and grateful thanks to Baylor doctors

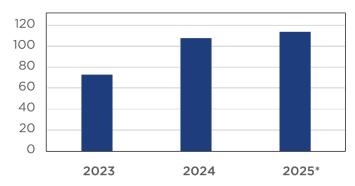


### Pulmonary Gym at Baylor St. Luke's Medical Center

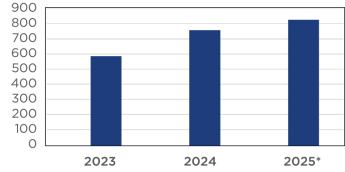


The 11th floor of Baylor St. Luke's Medical Center has been beautifully remodeled to enhance the patient experience with modernized facilities. Remodeling is also underway on the 10th floor, featuring expanded patient areas, private rooms and essential upgrades. The Baylor College of Medicine Lung Institute team played a key role in fund raising to provide equipment for the new pulmonary recovery gym, enabling patients to begin exercising immediately after lung surgery or interventions.

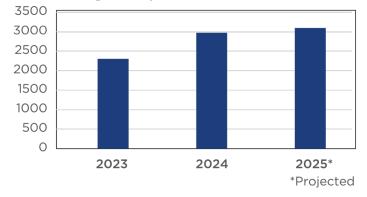
#### **Lung Transplant Case Volume**



Advanced Lung Disease Clinic Volume



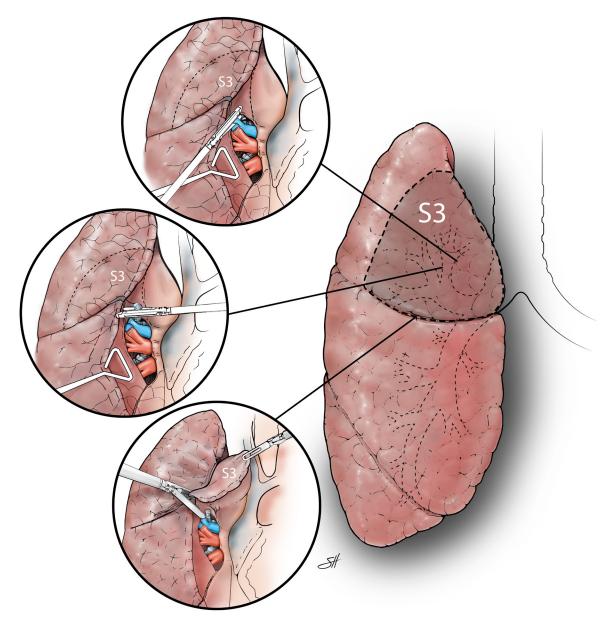
**Lung Transplant Clinic Volume** 





Drs. Gabriel Loor, Puneet Garcha, and Alexis Shafii with lung transplant patient Rebecca Haskin

#### Minimally Invasive Segmentectomy



Pulmonary Segmentectomy is a type of surgery used to treat lung cancer by sparing the portions of the lung that are not involved. This can translate into more lung left behind to preserve function and breathing. Patients with multiple lung cancers often benefit most from this technique. Surgeons at Baylor specialize in minimally invasive pulmonary segmentectomy.



Read the blog: What is pulmonary segmentectomy?



## Laryngeal and Tracheal Tumor Program



N. Eddie Liou, M.D. Associate Professor Head and Neck Surgery Bobby R. Alford Department of Otolaryngology



Andrew T. Huang, M.D.
Associate Professor
Head and Neck Surgery
Bobby R. Alford Department
of Otolaryngology

The laryngeal and tracheal tumor program focuses on the complex removal of benign and malignant tumors in the upper most aspect of the airway. Goal directed care is centered around optimization of speech and swallow outcomes in the face of complete tumor removal. Surgeries performed may range from endoscopic laryngeal sparing procedures to total laryngectomy or tracheal resection. Longitudinal care is also provided to ensure long term voice rehabilitation.

Our multidisciplinary approach to tumor and cancer care incorporates the expertise of a team which includes thoracic surgeons, radiation oncologists, medical oncologists, neuroradiologists, head and neck pathologists and speech and language pathologists.

- Primary tumors (benign and malignant) of the upper trachea and larynx
- Advanced thyroid carcinoma with laryngeal and upper tracheal involvement
- Upper tracheal and subglottic stenosis
- Radionecrosis of the upper trachea and larynx
- Complications of tracheostomy dependence

Jamail Specialty Care Center 1977 Butler Blvd. Houston, TX 77030 (713) 798-5900

## Laboratory for Medical Mass Spectrometry



Livia S. Eberlin, Ph.D.
Associate Professor
and Vice Chair for Research
Translational Research and Innovations Endowed Chair
Director, Translational and Innovations Research
Co-Director, INSTINCT
Michael E. DeBakey Department of Surgery

"We are extremely passionate about developing new molecular technologies that can advance and expedite care for patients with lung cancer and other diseases. Our MasSpec Pen device, for example has the potential to both accelerate diagnosis of lesions in bronchoscopies as well as assessment of lung cancer surgical margins to improve precision in surgical treatment."

One of our exciting inventions, MasSpec Pen technology, has been featured on the television series "Grey's Anatomy" and is currently being tested by surgeons in the Texas Medical Center. Our lab is funded by the NIH, CPRIT and other medical and research foundations.

Our laboratory's expertise is in the development and application of direct mass spectrometry technologies for tissue analysis and disease detection. Research projects are focused on the identification of metabolic markers of cancer and other diseases, as well as in the development of mass spectrometry based medical devices for surgical use. We use a combination of chemistry, mass spectrometry, statistical analysis, machine learning and device prototyping techniques to solve complex problems in biomedical research and develop new technologies to improve patient care.

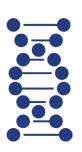
## Lung Genomics and Genetics



Richard A Gibbs, Ph.D.
Wofford Cain Chair and Professor
Molecular & Human Genetics
Director, Human Genome Sequencing Center

"The visionary quest was launched to sequence the human genome so that we would have this foundation to do all of it—whatever 'it' turned out to be. It was a big breakthrough upon completion, and the question immediately became, 'How do we push the genome into medicine?' Because impacting health is really what it's all about."

#### HGSC | agibbs@bcm.edu | (713)798-6539



The HGSC Clinical Laboratory (HGSC-CL) is the CAP/CLIA certified molecular diagnostic laboratory operating within the Human Genome Sequencing Center at Baylor College of Medicine.

With a commitment to improving health care through genomic testing, HGSC-CL offers clinical testing services in support of large-scale clinical sequencing efforts.



## Medical Oncology

## Dan L Duncan Comprehensive Cancer Center



Meera Patel, M.D., MHS
Assistant Professor
Section of Medical Oncology
Department of Medicine
Director, Thoracic Oncology Program

"Directing our thoracic cancer program is a highlight for my career. I enjoy working alongside my surgical, radiation and pathology colleagues to find the best customized treatment plan for my patients. We find exceptional ways to go above and beyond to deliver unexpected outcomes whenever possible."

The Dan L Duncan Comprehensive Cancer Center at Baylor St. Luke's Medical Center brings innovative treatments from lab to bedside faster than ever before to help stop cancer in its tracks.

Set apart from other centers by its Comprehensive Cancer Center designation by the National Cancer Institute (NCI), the center provides exceptional care to patients from all over the world. As one of only three NCI-designated Comprehensive Cancer Centers in Texas, the Duncan Cancer Center is one of the best in the country and contributes vital advances to cancer research through national funding. Specialized health care providers, including oncologists and radiologists are dedicated to understanding, preventing and treating various types of cancer.

- Breast Cancer
- Colorectal Cancer
- Gastrointestinal Cancer
- Genitourinary Cancers
- Gynecologic Cancers
- Head and Neck Cancers
- Leukemia & Lymphoma

- Liver Cancer
- Lung Cancer
- Mesothelioma
- Melanoma and Skin Cancer
- Neuroendocrine Tumors
- Pancreatic Cancer
- Prostate Cancer



Recognized for scientific and clinical excellence, the Duncan Cancer Center is home to exceptional discoveries and the development of more effective approaches to cancer prevention, diagnosis and treatment. In addition, the center performs outstanding cancer epidemiology and prevention research and sponsors innovative clinical trials of new preventive and treatment strategies.

Duncan Cancer Center (832) 957-6500

## Mesothelioma Treatment Center



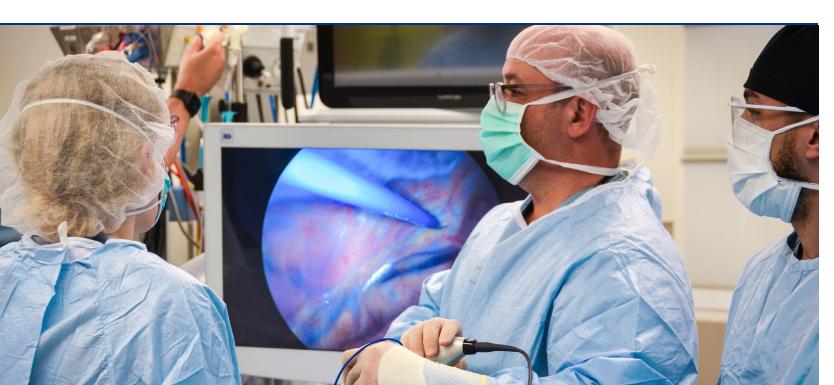
R. Taylor Ripley, M.D.
Professor of Surgery
David J. Sugarbaker Division of Thoracic Surgery
Director, Clinical Trials
Michael E. DeBakey Department of Surgery
Meyer-DeBakey Chair in Investigative Research

Director, Mesothelioma Treatment Center Baylor St. Luke's Medical Center

"My experience in successfully implementing clinical trials for patients with mesothelioma coupled with over 10 years of surgically treating these patients brings value to patients diagnosed with this devastating disease. Patients are key stakeholders in our programs, and we have partnered with patient and community organizations to tailor treatment where they are most likely to benefit."

The Mesothelioma Treatment Center is recognized worldwide as a leading-edge center for the diagnosis, treatment and research of malignant mesothelioma. Our physicians and staff use leading-edge medical techniques, including genetic and genomic approaches, combined with essential support and therapy to treat the whole person. To overcome the challenges of treating mesothelioma, we are actively committed to conducting clinical trials with new treatments, pharmaceuticals and procedures.

#### Baylor Medicine | 7200 Cambridge St. | (713) 798-6376



# Non-Tuberculous Mycobacterial Disease (NTM) Program



Sunjay Devarajan, M.D.
Assistant Professor
Section of Pulmonary, Critical Care & Sleep Medicine
Department of Medicine

"The Baylor NTM program offers patients a unique opportunity to build real-time treatment plans in a single visit rather than bounce around the offices of multiple specialists seeking answers. It efficiently fills a community and public health need."

#### Baylor Medicine | ntmclinic@bcm.edu | (713) 798-2400



Ahmed Hamdi, M.D. Assistant Professor Section of Infectious Diseases Department of Medicine

"I particularly enjoy working across specialties and alongside Dr. Devarajan to develop care plans for patients with complex pulmonary infections. The multidisciplinary nature of our practice helps patients find answers quicker and in a manner that is more closely aligned between providers."

The Baylor Medicine Non-Tuberculous Mycobacterial Disease (NTM) Program consists of a multi-disciplinary team of infectious disease specialists, pulmonologists, microbiologists and respiratory therapists working together to design the most effective treatment plan for our patients. This approach offers a unique opportunity to build real-time treatment strategies in a single visit, reducing wait times and improves efficiency.

Treatment for NTM infections is complex and usually involves a combination of antibiotics taken over a long period of time with frequent monitoring of sputum cultures, chest imaging and pulmonary function tests. Additional treatments may include pulmonary rehabilitation for symptom management and even surgery to remove infected tissue, particularly if the infection is localized to a specific lung area.

## Palliative Care



Charu Agrawal, M.D.
Assistant Professor
Medical Director, Palliative Medicine
Baylor St. Luke's Medical Center
Dan L Duncan Comprehensive
Cancer Center



Paige Farinholt, M.D.
Assistant Professor
Palliative Medicine
Dan L Duncan Comprehensive
Cancer Center

Our supportive care team includes specially-trained physicians, nurses and social workers who work together with a patient's other doctors to provide an extra layer of support. Unique to Dan L Duncan Comprehensive Cancer Center, the team is embedded within medical oncology so that patients can see their oncologists and palliative care on the same day and in the same place.

- Symptom management
- Support through communication and coordination of care with oncologist
- Advance care planning

Duncan Cancer Center | (832) 957-6500

## Post-COVID Care Clinic

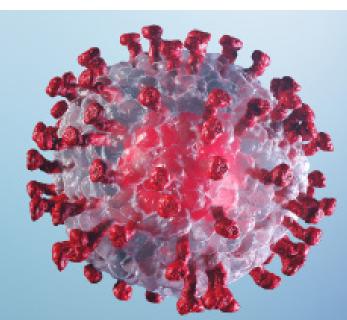


Fidaa Shaib M.D.
Associate Professor
Section of Pulmonary, Critical Care & Sleep Medicine
Department of Medicine
Chief Medical Officer, Baylor Medicine

"Our community of patients who continue to suffer from COVID-19 will need ongoing care. The Post-COVID clinic is created to meet those needs and help patients recover to get back to their best condition possible."

At the Post-COVID Care Clinic, a multidisciplinary team provides care in a compassionate and holistic approach to those inflicted with residual symptoms and long-term health issues, most of which are not well defined nor understood. Also known as "long-haulers," patients with long-term effects from COVID-19 often have respiratory symptoms such as cough or chest pain. However, patients recovering from COVID-19 experience many symptoms related to multiple organ systems. Our goal is to evaluate and provide state-of-the-art care to patients recovering from COVID-19, incorporating telehealth, when appropriate.

Baylor St. Luke's Medical Center 7200 Cambridge St. Houston, TX 77030 (713)798–5864



## Pulmonary Hypertension/CTEPH



Ajith P. Nair, M.D.
Associate Professor, Medicine & Cardiology
Medical Director of Pulmonary Hypertension

"Baylor College of Medicine has a long legacy of pioneering pulmonary hypertension. We are enrolling patients into clinical trials and have state-of-the-art diagnostic and therapeutic technology. Our needs are still great if we want to be the best in the country, and our team is committed to going the distance for our community"

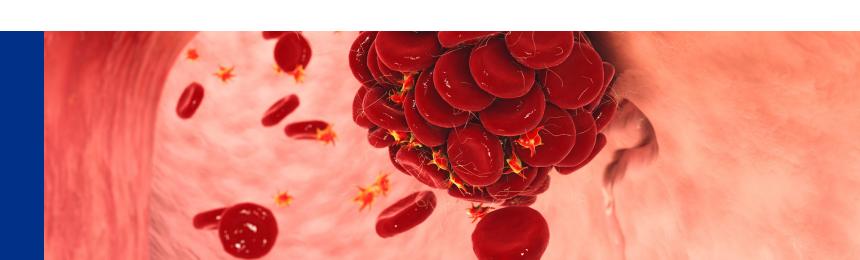
The Chronic Thromboembolic Pulmonary Hypertension (CTEPH) Program at Baylor St. Luke's Medical Center offers comprehensive, multidisciplinary care for patients with surgically and medically treatable CTEPH. As part of the broader Pulmonary Hypertension Program, we are one of the few centers equipped to evaluate and manage patients across the full therapeutic spectrum, including pulmonary thromboendarterectomy and balloon pulmonary angioplasty. Our growing program is anchored by a dedicated team spanning pulmonology, cardiology, interventional cardiology, cardiothoracic surgery, radiology, cardiac anesthesia, critical care medicine and hematology. We maintain structured case conferences to evaluate candidacy for intervention or transplant, ensuring individualized care aligned with best practices and long-term outcomes.



#### Meet Our Team Leaders

- Ajith Nair, M.D.
   Pulmonary Hypertension Medical Director, Advanced Heart Failure, Cardiology
- Cyrus Vahdatpour, M.D., MSc
   Pulmonary Hypertension/Transplant specialist, Pulmonary and Critical Care
- Hao-Min Pan, M.D., MSCE
   Pulmonary Hypertension/Transplant specialist, Pulmonary and Critical Care
- Prangthip Charoenpong, M.D., MPH
   Pulmonary Hypertension/Transplant specialist, Pulmonary and Critical Care

832-355-9125 or 832-355-9008 Office 832-355-3499 Fax 6620 Main St. Houston Texas 77030 Ste. 1475



## Radiation Oncology



Zaid Siddiqui, M.D. **Assistant Professor** Radiation Oncology

"At Baylor, our multidisciplinary team works together to customize a plan of care to fit every patient's unique physical and emotional needs and to respect their values. When designing radiation plans, no two patients are the same—working with the Baylor team allows me to reduce the burden of treatment, provide optimum support to patients and their families, and provide timely, highquality care."

As a high-volume center, Baylor Radiation Oncology routinely performs procedures that may be done only occasionally at other locations. Studies have shown that centers performing higher volumes of procedures have better patient outcomes.

#### Types of Radiation Therapy:

3D Conformal Treatment Planning and Delivery: Three-dimensional conformal radiation therapy (3D-CRT) is an emerging technology in radiation therapy that involves multimodality imaging techniques, accurate radiation dose calculation methods, computer optimized treatment planning and computer- controlled treatment delivery.

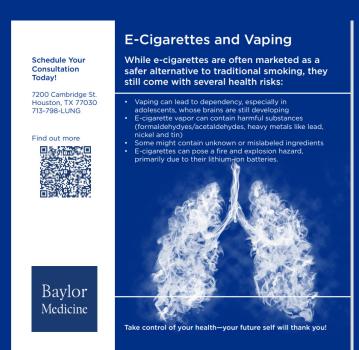
Intensity Modulated Radiation Therapy: This advanced type of radiotherapy uses a computercontrolled device called a linear accelerator to deliver precise doses of radiation to tumors or specific areas within the tumors.

Image-Guided Radiation Therapy: IGRT uses frequent imaging during a course of radiation therapy to improve the precision and accuracy of the delivery the radiation treatment. Stereotactic Radiosurgery: Despite its name, radiosurgery is a treatment, not a surgical procedure. This non-invasive procedure involves highly precise, large doses of radiation to ablate tumors in the lung while minimizing damage to healthy tissue.

Radioimmunotherapy: Radioimmunotherapy is mainly used to treat lymphoma and lymphocytic leukemia. It combines a radioactive substance with a monoclonal antibody that's injected (infused) in your body. The monoclonal antibody targets, and sometimes reacts with, proteins on cancer cells called antigens. The radioactive molecule destroys the cells.

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#### **SMOKING CESSATION**





upport and resources to help you succeed. Smoking is ne leading cause of lung disease and complications after urgery. Quitting now can: Lower your risk of lung cancer and heart disease Boost lung function and improve overall health Keep your loved ones safe from harmful secondhand

Our Program Offers:

oin our Smoking Cessation Program for expert guidance

**Smoking Cessation** 

Quit Smoking, Breathe Easy!

Ready to Quit? We are here to help!

guidance from our dedicated team Nicotine Replacement Options - Access to patches, gur

and medications to ease the transitio

Continuous Support and Check-Ins - You're never alor We'll be there with regular follow-ups, motivation and tools to help you stay on course.

Baylor Medicine

Quitting smoking is a powerful step toward better health—no matter where you are on your journey, we're here to support you



During initial consultation, patients will receive information regarding the Tobacco Cessation Program and answers to any questions they might have. Treatment specialists will evaluate tobacco use and related factors that may trigger or influence tobacco usage. A detailed plan for treatment and quitting will be created. One to two week follow-up visits (eg, telemedicine encounters or in-person office visit) will be advised to offer support, monitor for adverse pharmacologic effects and emphasize adherence to medication.

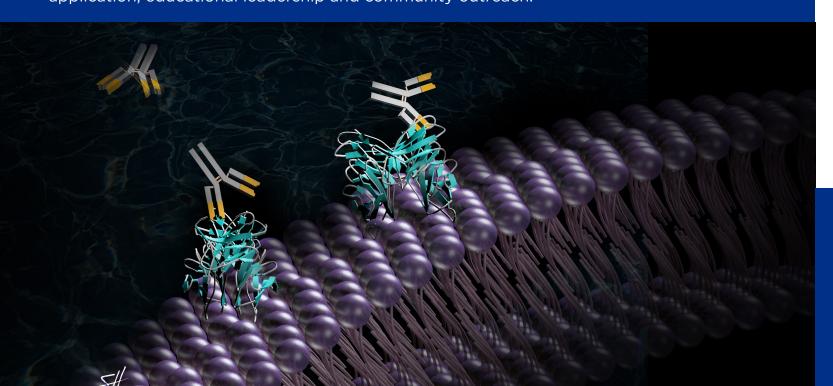
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## Systems Onco Immunology Laboratory (SOIL)



Hyun-Sung Lee, M.D., Ph.D.
Associate Professor of Surgery
Michael E. DeBakey Department of Surgery
David J. Sugarbaker Division of Thoracic Surgery
Director, Systems Onco-Immunology Lab
Baylor College of Medicine

The Systems Onco-Immunology Laboratory (SOIL) at Baylor College of Medicine, under the leadership of Hyun-Sung Lee, M.D., Ph.D., is a pivotal center for translational oncology research. This interdisciplinary hub unites surgeons, medical oncologists, immunologists, geneticists, proteogenomic experts and bioinformaticians in the pursuit of groundbreaking research in onco-immunology. SOIL's work extends beyond research, encompassing educational endeavors in systems onco-immunology and active engagement with the scientific community. Its core aspects are: Sophisticated Research Infrastructure, Onco-Immunologic Personalized Medicine, Integration with Clinical Practice, Leadership in Interdisciplinary Collaboration and Educational Excellence and Community Involvement. Through this structured and visionary approach, SOIL is set to make significant strides in onco-immunology within surgical oncology, combining innovative research, clinical application, educational leadership and community outreach.



## Sleep Medicine and Snoring



Fidaa Shaib M.D.
Associate Professor
Section of Pulmonary, Critical Care & Sleep Medicine
Department of Medicine
Chief, Medical Officer, Baylor Medicine



Philip Mani Alapat, M.D.
Associate Professor
Section of Pulmonary, Critical Care & Sleep
Medicine
Department of Medicine
Program Director, Pulmonary and Critical
Care Medicine Fellowship

The Baylor Medicine Sleep Clinic specializes in diagnosing and treating a wide range of sleep disorders. The clinic is led by Dr. Fidaa Shaib, who serves as the director of both the Sleep Medicine Clinic and the Sleep Center. Our team of experts provide thorough evaluations and personalized treatment plans for a wide range of sleep-related conditions.

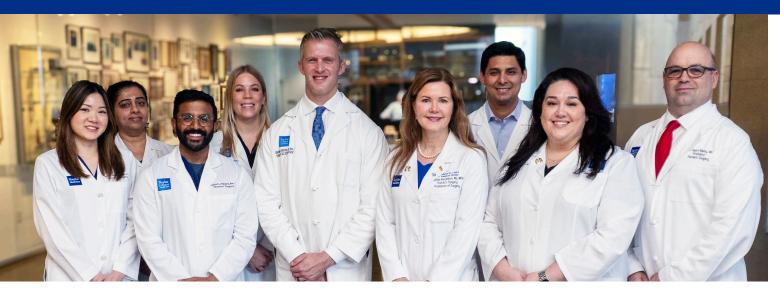
We collaborate closely with Baylor Medicine ENT to offer advanced treatments like hypoglossal nerve stimulation (Inspire) for obstructive sleep apnea. Additionally, the center works with the neurology department to coordinate care for patients requiring home ventilation, both non-invasive and invasive.

- Sleep apnea
- Snoring
- Insomnia
- Narcolepsy
- Parasomnias

- Restless leg syndrome (RLS)
- Shift work disorder
- Non 24 sleep-wake disorder
- Excessive sleepiness

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## **Thoracic Surgery**



The Thoracic Surgery Clinic at Baylor Medicine's Lung Institute specializes in the care and treatment of patients with benign and malignant disorders of the chest cavity. This includes lung cancer, esophageal cancer, thymoma, mesothelioma and all other malignancies involving the thorax.

Together with the outstanding support staff of nurses, nurse practitioners and physician-assistants, our surgeons attract patients from all over Texas, and from across the United States. An international program for patients from around the globe is available for those who need special help and assistance.

In addition to outstanding clinical care, our surgeons and staff are committed to the development of new treatments for thoracic disease through research and innovation. New technology drives their innovative techniques that lead to less pain after surgery and a speedier postoperative recovery.



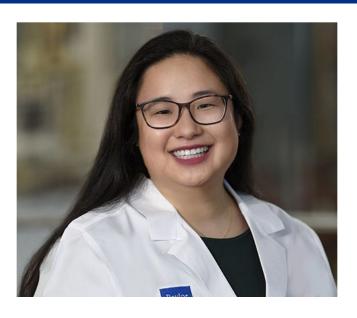
Clarity of Purpose and focused attention are indeed the essence of excellence

Dr. David J. Sugarbaker was the founder of the Lung Institute and the Division of Thoracic Surgery within the Department of Surgery at Baylor College of Medicine. The surgeons he recruited to Houston continue to drive excellence in patient care. His legacy will continue to live on as the current members of the David J. Sugarbaker Division of Thoracic Surgery.

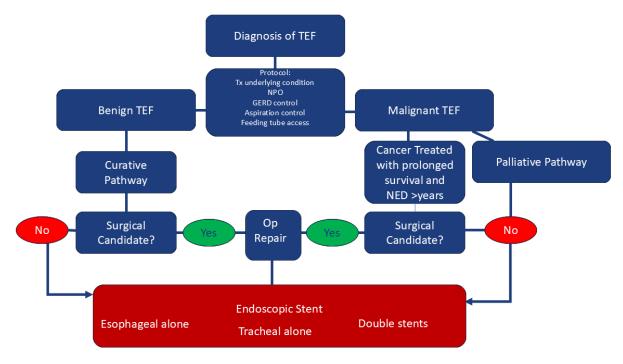
#### Baylor Medicine | lungsched@bcm.edu | (713)798-6376

- Lung Cancer
- Mesothelioma
- Esophageal cancer
- Thoracic outlet syndrome
- Thymoma and mediastinal tumors
- Reflux and benign esophageal diseases
- GERD
- Slipping rib syndrome
- Trachea disorders
- Benign lung diseases

## Tracheoesophageal Fistula Management



#### Algorithm for Management of Adult TEF





Read the blog: Surviving cancer and tracheoesophageal fistula: Sandy Tovey's journey



## Robotic Thoracic Surgery



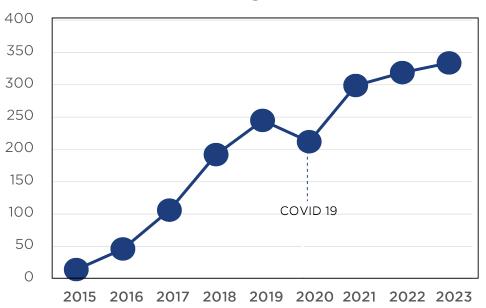
Our robotic thoracic surgery program is recognized as one of the top ten programs in the nation. Every thoracic surgeon in our division performs minimally invasive surgery and is certified and credentialed to perform robotic lung resections.

We specialize in robotic navigational bronchoscopy for minimally invasive lung biopsies, robotic esophagectomy for treatment of esophageal cancer as well as robotic lung resections. Our teams are trained to perform robotic tracheobronchoplasty to offer advanced solutions for tracheal reconstruction.

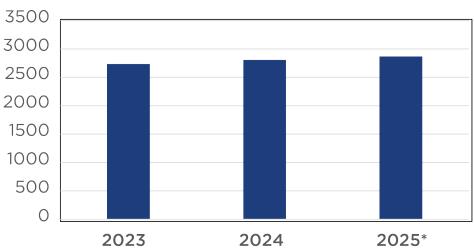
One of the main benefits of robotic thoracic surgery versus open surgery is that it is a less invasive procedure. This means that there are smaller incisions, less blood loss, and a shorter hospital stay. Patients who undergo robotic thoracic surgery also tend to experience less pain and scarring than those who have open surgery.

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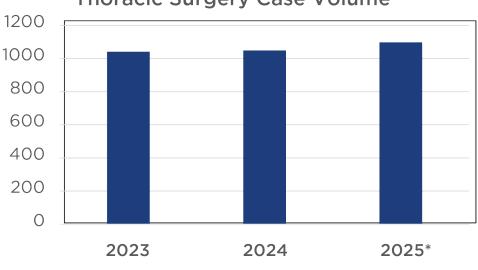
#### **Robotic Thoracic Surgical Cases**



#### Thoracic Surgery Clinic Volume



#### **Thoracic Surgery Case Volume**



# Baylor St. Luke's celebrates 300th robotic-assisted bronchoscopy

More than 300 Baylor St. Luke's Health patients have now benefited from a robotic-assisted bronchoscopy, a minimally invasive procedure allowing doctors easier access to the lungs to detect cancers.

Robotic-assisted bronchoscopies help doctors reach small, difficult-to-access nodules in the lung with improved accuracy and less risk compared to a traditional bronchoscopy. The advanced procedure, performed using the ION System, offers patients faster recovery times and earlier diagnoses.

## Make a Gift

Your gift to the Lung Institute will help pioneer new procedures and technologies, advance medical research, improve the quality of patient care and train the next generation of surgeons, educators and innovators. Thank you for your generosity.



Baylor College of Medicine

