

SECTION OF PULMONARY, CRITICAL CARE AND SLEEP MEDICINE

SECTION ACCOMPLISHMENTS

- Our section faculty provides compassionate, comprehensive, clinical care to a diverse population in the Houston Metropolitan area through our three Baylor Medicine affiliates: Ben Taub Hospital, Baylor Saint Luke's Medical Center and The Michael DeBakey Veterans Affairs Medical Center. Over the last year, we have expanded the number of critical care faculty to address the increasing demands related to the COVID-19 pandemic and created outpatient clinics to provide long-term care for covid patients with Post Covid and Clinic at Home programs. All pavilions have initiated new lung cancer screening programs. Our programs are nationally ranked as a high performing level in Pulmonology and Lung Surgery.
- We have world-class clinical training programs that provide outstanding educational opportunities through multiple academic series, including Pulmonary, Critical Care and Sleep Medicine Grand Rounds, which has featured local, national, and internationally recognized speakers. Over the last year, several faculty members were appointed to educational leadership positions nationally and across the college, several others received College education awards including the prestigious Barbara and Corbin J. Robertson, Jr. Presidential Award for Excellence in Education.
- Our section has a strong tradition of research excellence. This year, our faculty published more than 100 peer-reviewed articles, a number were published in high-impact journals (*NEJM, JAMA, Nature Communications, and Science Translational Medicine*) and top-rated pulmonary subspecialty journals (*AJRCCM, ERJ, Chest, and AJRCMB*). Our faculty successfully led research programs in COVID-19 pneumonia and participated in novel vaccination and biomarker research COVID-19 studies. In the last year our research faculty was awarded total direct and indirect research support of \$10.5 million from federal and private research grants issued in FY21. Research training is an integral part of our fellowships, trainees interested in pursuing a clinician scientist track are supported through multiple NIH-NHLBI T32 grants.



SECTION CHIEF

Ivan O. Rosas, MD

FACULTY

Section Leadership

Baylor Medicine/Baylor St. Luke's Medical Center

- Ivan O. Rosas, MD, Section Chief
- Fidaa Shaib, MD, Baylor Medicine Director
- Muhammad Asim Siddique, MD, MICU Director
- Prasad Manian, MD, Director and Associate Chief for Clinical Affairs
- Puneet Garcha, MD, Lung Transplant Director

Ben Taub Hospital

- Nicola Hanania, MD, Interim Chief Ben Taub Hospital
- Philip Alapat, MD, Pulmonary Critical Care and Sleep Fellowship Director
- Kalpalatha Guntupalli, MD, Critical Care Fellowship Director

Michael E. DeBakey VA Medical Center

- Venkata Bandi, MD, Chief Michael E. DeBakey VA Medical Center

Faculty

Baylor Medicine/Baylor St. Luke's Medical Center

Professor

- Maher Baz, MD
- James Herlihy, MD
- Prasad Manian, MD
- Ivan O. Rosas, MD

Associate Professor

- Puneet Garcha, MD
- Sara Nowakowski, PhD
- Fidaa Shaib, MD

Assistant Professor

- Fatima Adhi, MD
- Kumar Anupam, MD
- Jairo Barrantes – Perez, MD
- Tara Barto, MD
- Andrea Braun, MD
- Sunjay Devarajan, MD

- Modi Dipaben, MD
- Muhammad Hayat Syed, MD
- Timothy Hotze, MD
- Christopher Howard, MD
- Ali Jiwani, MD
- Minkyung Kwon, MD
- Gloria Li, MD
- Thomas Monaco, MD
- Christopher Morgan, MD
- Madhu Nair, MD
- Ali Omranian, MD
- Justin Segraves, MD
- Muhammad Asim Siddique, MD
- Trevino Castillo Sergio, MD
- Helina Wakwaya, MD
- Annise Wilson, MD
- Tianshi David Wu, MD

Instructor

- Jessica Farrell, NP

- Edward Hatrick, NP

Ben Taub Hospital

Professor

- Kalpalatha Guntupalli, MD

Associate Professor

- Nicola Hanania, MD

Assistant Professor

- Muhammad Adrish, MD
- Philip Alapat, MD
- Elizabeth Guy, MD
- Amy Heibel, MD
- Babith Mankidy, MD
- Dharani Narendra, MD
- Elaine Palacios, MD
- Purvesh Patel MD
- Pralay Sarkar, MD

Michael E. DeBakey VA Medical Center

Professor

- Farrah Kheradmand, MD
- Rolando Rumbaut, MD, PhD
- Amir Sharafkhaneh, MD, PhD
- Bandi Venkata, MD

Associate Professor

- Christina Kao, MD, PhD
- Charlie Lan, MD
- Kanta Velamuri, MD

Assistant Professor

- Ritwick Agrawal, MD
- Uma Ayyala, MD
- Stephen Bujarski, MD
- Ray Lazarus, MD
- Shahram Moghtader, MD
- Lavannya Pandit, MD
- Supriya Singh, MD

Pavilion for Women

Assistant Professor

- Muhammad Asim Siddique, MD

Non-Clinician Research

Professor

- Aladin Boriek, PhD

Assistant Professor

- Lindsay Celada, PhD
- Freddy Romero, PhD
- Konstantin Tsoyi, PhD

Instructor

- Mustafa Atik, MD, PhD
- Liang Xiaoliang, PhD

HONORS AND ACHIEVEMENTS

Ritwick Agrawal, MD

- 2021 Baylor College of Medicine Star Patient Care Award
- 2021 Star Awards for Excellence in Patient Care
- Norton Rose Fulbright Faculty Excellence Award for Teaching and Evaluation

Philip Alapat, MD

- Norton Rose Fulbright Award for Faculty Excellence in the category of Educational Leadership
- Norton Rose Fulbright Faculty Excellence Award for Teaching and Evaluation
- Top Doctors, *Houstonia* Magazine

Uma Ayyala, M.D

- Norton Rose Fulbright Faculty Excellence Award for Teaching and Evaluation
- Selected as one of six winners of the spring 2021 Institutional Committee At-Large Faculty Elections
- Named Associate Chief of Staff for Education at the VA Medical Center

Jairo Barrantes-Perez, MD

- Re-appointed to the AASM public safety committee

Andrea Braun, MD

- FCCP designation (Fellow of the American College of Chest Physicians)
- Chest Hall of Heroes
- Appointed to APCCMPD (Association of Pulmonary and Critical Care Medicine Program Directors) Interview Task Force, spring 2021 (developed recommendations for PCCM and CCM fellowship interviews)
- Appointed to APCCMPD Education Committee
- Appointed to Chest Education Outcomes Subcommittee
- Elected to Institutional Policy Committee Member, Baylor College of Medicine
- Elected to Baylor Faculty Senate, member-at-large
- Selected for Master Teachers Fellowship Program, Baylor College of Medicine
- Appointed to ABIM Critical Care Item Writing Task Force

Steve Bujarski, MD

- Norton Rose Fulbright Award for Teaching and Evaluation

Sunjay Devarajan, MD

- Top Doctors 2021, *Houstonia* Magazine

Fidaa Shaib, M.D

- Elected to the Board of Governors At-Large at Baylor Medicine
- *Houstonia* Magazine's Top Docs
- Named designated member of the Inclusion and Excellence Council

Puneet Garcha, MD

- Appointed to the American Thoracic Society's Clinicians Advisory Committee for 2021-2022
- Appointed to the editorial board of *The Journal of Heart Lung Transplantation* 2021 – 2024
- MBA, graduated from Ross School of Business, May 2021

Elizabeth Guy, MD

- 2021 Baylor College of Medicine Women of Excellence award

Christopher Howard, MD

- Top Doctor (Critical Care Medicine), *Houstonia* Magazine

Kalpalatha Guntupalli, MD

- Hero award - Gold Pin awarded in recognition of exceptional leadership during the COVID-19 epidemic
- Recognized in CHEST COVID Hall of Heroes
- Co-developer of medical telehealth consultant during India's COVID-19 crisis

Christina Kao, MD, PhD

- Top Doctors, *Houstonia* Magazine
- Norton Rose Fulbright Award for Educational Leadership
- Norton Rose Fulbright Award for Enduring Educational Materials

Farrah Kheradmand, MD

- 2021 American Thoracic Society Recognition Award for Scientific Accomplishments

Charlie Lan, MD

- Top Doctors 2021, *Houstonia* Magazine
- Appointed Associate Chief of Staff at the VA Medical Center

Prasad Manian, MD

- Top Doctors, *Houstonia* Magazine
- Super Doctor, *Texas Monthly* magazine

Babith Mankidy, MD

- PCCM Fellows BTH Faculty of the Year Award 2020-2021

Thomas Monaco, MD

- Selected to participate in 2021 Scholarly Time initiative

Christopher Morgan, MD

- Early Career Faculty Award for Excellence in Patient Care
- Top Doctor (Critical Care Medicine), *Houstonia* Magazine
- Norton Rose Fulbright Faculty Excellence Award for Teaching and Evaluation in 2020

Dharani Narendra, MD

- 2021 Baylor College of Medicine Women of Excellence award
- Norton Rose Fulbright Faculty Excellence Award for Teaching and Evaluation

- BCM Internal Medicine best teaching award for inpatient- subspecialty
- Recognized in CHEST COVID Hall of Heroes
- Inducted to Master Teacher Fellowship Program, class of 2021-2023

Nicola Hanania, MD

- Interim Chief of Pulmonary, Critical Care and Sleep Medicine at Ben Taub Hospital
- Distinguished CHEST Educators 2020

Lavannya Pandit, MD

- Promoted to Associate Professor, Tenure Track

Purvesh Patel MD

- CCM Fellows Ben Taub Hospital Faculty of the Year Award, 2020-2021

Rolando Rumbaut, MD, PhD

- Senior Clinician Scientist Investigator from the National VA Biomedical Laboratory Research and Development Service

Pralay Sarkar, MD

- Distinguished CHEST Educators 2020

Muhammad Asim Siddique, MD

- Top Doctors (Critical Care Medicine), 2020 and 2021, *Houstonia* Magazine
- BSLMC representative for Texas division of Critical Care
- BCM Faculty Senate 2020
- Chest Foundation Community Service committee in 2020
- Chest Foundation Research Grant committee in 2020

Supriya Singh, MD

- 2021 Baylor College of Medicine Women of Excellence award
- Early Career Faculty Award for Excellence in Patient Care
- Named Sleep Medicine Fellowship Director

Sergio Trevino Castillo, MD

- Re-appointed to the AASM public safety committee.
- BCM Internal Medicine best teaching award for inpatient – subspecialty
- COVID guidelines development
- CLABSI Task Force
- Infection Prevention Committee

Kanta Velamuri, MD

- Barbara and Corbin J. Robertson, Jr. Presidential Award for Excellence in education.

- 2021 Baylor College of Medicine Star Patient Care Award
- 2021 Baylor College of Medicine Women of Excellence award
- 2021 Star Award for Excellence in Patient Care

RESEARCH ACTIVITIES

Grants

Tara Barto, MD

- CF Center, Cystic Fibrosis Foundation; \$250,000
- Ellox Pharmaceuticals (US); \$27,367.49

Lindsay Celada, PhD

- KO1, National Heart, Lung and Blood Institute; \$134,549

Kalpalatha Guntupalli, MD

- Boehringer Ingelheim Pharmaceutical; \$5,010.60

Christopher Howard, MD

- Cellenkos Inc.; \$64,583.63

Farrah Kheradmand, MD

- Department of Defense Congressionally Directed Medical Research Programs; \$364,530
- RO1 National Institutes of Health; \$109,523
- RO1 National Institutes of Health; \$328,257
- RO1 National Institutes of Health; \$132,494

Lavannya Pandit, MD

- Department of Veterans Affairs; \$710,000
- Department of Veterans Affairs; \$34,543
- Department of Veterans Affairs; \$500,000
- National Institutes of Health; \$134,000

Purvesh Patel, MD

- Denver Health and Hospital Authority; \$32,689.99

Freddy Romero, PhD

- RO1 National Heart, Lung and Blood institute: \$400,000

Ivan Rosas, MD

- T32 National Heart, Lung and Blood Institute; \$72,955
- UO1 National Institutes of Health; \$67,842
- RO1 National Institutes of Health; \$85,500

- Three Lakes Foundation; \$109,252
- Hoffman-La Roche LTD; \$3,216,309.19
- Fibrogen Inc.; \$28,111.70
- Genentech Inc.; \$1,868,449.86
- Genentech Inc.; \$475,643.75
- Hoffman La-Roche; \$78,656.20
- Sergey Brin Family Foundation; \$621,739.14

Rolando Rumbaut, MD, PhD

- RO1 National Heart, Lung and Blood Institute; \$344,389
- T32 National Institutes of Health; \$22,473
- VA Research and Education Foundation; \$5,445.85

Konstantin Tsoyi, PhD

- Hope for the Breathless Charity; \$5,000
- KO1 National Institutes of Health; \$130,950

Tianshi David Wu, MD

- K23 National Institutes of Health; \$185,374

Publications

- *American Journal of Respiratory and Critical Care Medicine* (IF **21.4**): **5**
- *Journal of the American Medical Association* (IF **56.2**): **2**
- *Arthritis & Rheumatology* (IF **9.0**): **1**
- *Annals of the American Thoracic Society* (IF **6.8**): **1**
- *American Journal of Transplantation* (IF **7.2**): **1**
- *Journal of Clinical Sleep Medicine* (IF **4.0**): **3**
- *Systematic Reviews* (IF **9.3**): **2**
- *Stem Cells* (IF **5.6**): **1**
- *Science Translational Medicine* (IF **11.5**): **2**
- *Science Advances* (IF **14.1**): **1**
- *Thorax* (IF **4.3**): **3**
- *Chest* (IF **8.3**): **14**
- *The New England Journal of Medicine* (IF **91.2**): **2**
- *European Respiratory Journal* (IF **12.3**): **10**
- *Circulation* (IF **23.6**): **2**
- *Journal of Inflammation* (IF **4.9**): **3**
- *Respiratory Research* (IF **4.0**): **3**
- *Aging* (IF **5.7**): **2**
- *American Journal of Obstetrics & Gynecology* (IF **7.6**): **1**
- *Clinical Infectious Diseases* (IF **9.0**): **1**
- *Allergy* (IF **14.1**): **6**

- *American Journal of Kidney Diseases* (IF 8.9): 1
- *The Lancet Respiratory Medicine* (IF 25.1): 3
- *Journal of Asthma and Allergy* (IF 4.3): 1
- *The Journal of Allergy and Clinical Immunology* (IF 14.1): 2
- *Mechanisms of Ageing and Development* (IF 4.3): 1
- *Human Molecular Genetics* (IF 6.2): 1
- *Molecular Medicine* (IF 4.0): 1
- *Frontiers in Medicine* (IF 4.0): 1
- *Matrix Biology* (IF 8.5): 1
- *Current Opinion in Microbiology* (IF 8.1): 1
- *NPJ Precision Oncology* (IF 7.9): 1
- *Scientific Reports* (IF 4.0): 1
- *JCI Insight* (IF 8.3): 1
- *Pharmacology* (IF 9.9): 1
- *International Journal of Molecular Sciences* (IF 5.9): 1
- *EMBO Reports* (IF 7.5): 1
- *Nature Communications* (IF 12.12): 2

Books and Book Chapters

Prasad Manian, MD

- Lung Infections: An Overview. In: *Adult Chest Surgery*, 3rd Ed.

Sara Nowakowski, PhD

- *Adapting Cognitive Behavioral Therapy for Insomnia* (In press)
- Sleep in women during pregnancy and postpartum. In: *The Encyclopedia of Sleep Disorders and Circadian Rhythms*, 2nd Ed. (In press)
- CBT for menopause and postmenopause. In: *Adapting Cognitive Behavioral Therapy for Insomnia* (In press).
- Insomnia evaluation and therapeutic modalities. In: *Sleep Disorders in Women: A Guide to Practical Management*, 3rd Ed.

Lavannya Pandit, MD

- Pulmonary Hypertension. In: *Cardiology Secrets*, 6th Ed. (In press)

CENTERS

Airways Clinical Research Center

The **Airways Clinical Research Center (ACRC)** at Baylor College of Medicine has been funded by the American Lung Association (ALA) since 1999 to conduct multicenter clinical trials in asthma and COPD. The Center includes faculty from the Section of Pulmonary, Critical Care and Sleep Medicine in the Department of Medicine and the Section of Pediatric Pulmonary Medicine in the Department of

Pediatrics. Dr. Nicola Hanania serves as the director. The ACRC has a productive record of accomplishment of large-scale clinical research studies. The ACRC comprises 15 clinical centers with multiple consortium recruitment sites (38 sites) with broad geographic representation, each led by a center director with significant experience in respiratory disease. Each center receives support from the ALA, which is typically used to fund a partial effort of the Center Director and to provide core support for personnel, supplies, and other infrastructure required to complete (typically NIH-funded) studies. The ALA-ACRC also has an experienced and effective data-coordinating center (Johns Hopkins University) and an established biorepository center (at Nemours Children's Hospital). Through the infrastructure of the ALA and its local offices, the Centers have a robust mechanism to engage stakeholders and the community in our efforts to recruit patients for the different studies.

The ACRC Network was recently funded to conduct a large prospective Lung Health Cohort to form the first national cohort of young adults focused on lung health defined by symptoms, lung function and chest imaging. The study will recruit 4,000 community-dwelling adults, at the age of peak lung health (25 to 35 years old), from 29 metropolitan regions across the U.S. and determine lifetime ambient pollution exposures at home, work and school; health behaviors; and blood biomarkers to identify targets for the interception of lung disease at the earliest stages. In addition, the ACRC completed two large NIH-funded studies, the first to investigate the effects of Losartan on the progression of emphysema as well as a second study that investigated the role of weight loss using behavioral interventions on patients with COPD.

The Lung Institute

The **Lung Institute** provides diagnostic and treatment services to patients with benign and malignant neoplasms and other disorders of the lung, as well as the esophagus, mediastinum and chest wall. The institute offers patients professional medical evaluations by a multidisciplinary team that includes specialists from surgery, medical oncology, pulmonary medicine, radiation oncology, and radiology. The Lung Institute has developed a comprehensive program across departments and disciplines, with all of the College's missions as part of the effort. The surgical program is located at Baylor St. Luke's Medical Center – TMC, part of CHI St. Luke's Health.

In addition, the Lung Institute offers holistic care for patients and their families. Full-time chaplaincy services, social workers, physical therapists, dieticians and patient navigators help patients and their families deal with the stress of illness. These efforts allow patients and their families to take an active role in their own care plans.

Sleep Center

The **Baylor Medicine Sleep Center** is one of the Southwest's most comprehensive sleep facilities. Our experts specialize in the diagnosis, surgical and non-surgical treatment of sleep disorders, complete evaluations, and treatment focusing on long-term solutions for the full range of behavioral sleep disorders, including insomnia, snoring, sleep apnea, restless legs, narcolepsy, and parasomnias.

Cystic Fibrosis Center

The **Baylor Medicine Maconda Brown O'Connor, PhD, Adult Cystic Fibrosis Center** provides the highest-quality care in a compassionate, patient-centered setting. The Center, which is accredited by the

Cystic Fibrosis Foundation, is one of the largest in the United States and is the only accredited cystic fibrosis center in Harris and surrounding counties. Offering comprehensive, multidisciplinary care to adult patients with cystic fibrosis and their families, its faculty pride themselves on providing evidence-based, state-of-the-art care.

Additionally, the Center has been designated a Therapeutic Development Network site by the Cystic Fibrosis Foundation, promoting the conduct of cutting-edge clinical research and providing a forum for collaboration with other organizations to advance the care of cystic fibrosis.