

**PULMONARY, CRITICAL CARE
AND SLEEP MEDICINE
2020 ANNUAL REPORT**

SECTION OF PULMONARY, CRITICAL CARE AND SLEEP MEDICINE



SECTION CHIEF

Ivan O. Rosas, M.D.

It is my pleasure to provide the 2019-2020 Annual Summary Report for the Baylor College of Medicine Pulmonary, Critical Care and Sleep Medicine (PCCSM) Section. Our overall mission is to provide comprehensive, innovative and compassionate clinical care to a diverse patient population, to train outstanding clinicians in a rigorous academic environment that will equip them to become the next generation of academic leaders and to advance the field of Pulmonary, Critical Care and Sleep Medicine through cutting-edge translational research programs. Our core activities are outlined below:

Clinical

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 (BSLMC) and The Michael DeBakey Veterans Administration Medical Center. A focus on primary and secondary prevention, lung and sleep health and treatment of common pulmonary conditions is effectively delivered through general pulmonary clinics. Importantly, treatment of multiple complex lung disorders is provided through multi-disciplinary teams and delivered in subspecialty clinics and inpatient services. Inpatient services include the Medical Intensive Care Units (MICU) with greater than 100-bed capacity, Consult Service and Thoracic Interventional Program, and a Lung Transplant Program, which all together treat thousands of patients with complex disorders annually.

Education

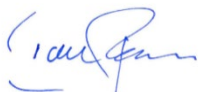
The size and depth of the section's education mission continues to grow and spans training of medical students, residents and fellows. Continued education of faculty and program graduates is considered a key component of the education mission. This year we have 30 fellows, including 18 traditional pulmonary and critical care medicine fellows, six critical care medicine fellows and six sleep medicine fellows. Research training is an integral part of our fellowships, trainees interested in pursuing a clinician scientist track are supported through multiple National Institutes of Health (NIH)-National Heart, Lung, and Blood Institute (NHLBI) T32 grants. All faculty participate in educational activities and a majority of them self-identify as educators; some of our faculty hold educational leadership positions and many participate in diverse educational programs across the college.

Research

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 (*JCI, Nature Communications, Science Advances and Science Translational Medicine*) and top-rated pulmonary

subspecialty journals (*AJRCCM, ERJ, Chest and AJRCMB*). Our established clinical and basic science researchers are supported by NIH, Department of Defense (DOD), and Veterans Affairs (VA) grants, three of our junior scientists are funded by NIH K-mentored grants and our section boasts a robust portfolio of clinical trials funded by government agencies and the pharmaceutical industry. Our research programs continue to expand supported by the newly developed Pulmonary Critical Care and Sleep Medicine Clinical Trials Unit and Registries.

In closing, it is important to acknowledge that the **COVID-19 Global Pandemic** has substantially increased demands for critical care services that has directly impacted our sections ability to address our clinical, educational and research missions. To date, our faculty has successfully treated hundreds of critically ill patients, while continuing to educate our trainees and further our research mission. I sincerely thank our faculty for their personal sacrifice and commitment to our core missions in these challenging times.



Ivan O. Rosas, M.D.

HIGHLIGHTS

- **COVID-19:** As a society and medical professionals we have been confronted with the most demanding medical crisis in the last 100 years. The section has demonstrated a level of commitment that challenges the magnitude of this crisis. In addition to treating hundreds of patients in the critical care and medical wards, we continue to provide state of the art ambulatory care through telemedicine, perform interventional pulmonary procedures for patients with suspected lung cancer, perform elective lung transplants and address patient needs with dedication and compassion. Despite the increased demands, our faculty remains committed to the education of trainees and meeting their research commitments.
- **Clinical:** Our clinical programs have expanded, in the outpatient setting we have developed the Advanced Lung Disease Program and recruited new faculty to lead key subspecialty programs. Through strategic partnerships with the Thoracic Surgery Department, we have invigorated the Baylor Lung Institute and outlined priorities for the development of innovative programs (i.e. Lung Cancer Screening Program) that will address local unmet clinical needs and increase collaborations with the Lung Cancer Center and others.
- **Education:** Our strong tradition of leadership in education has continued, our teaching curriculum for fellows is constantly being updated, several faculty received teaching awards and others have been promoted to leadership positions. We have further enhanced our efforts by successfully launching Pulmonary Grand Rounds in collaboration with the BSLMC Tom Solis Lecture, developed annual conferences that provide advances in Critical Care, Advanced Lung Disease and Lung Transplantation in collaboration with the Department of Surgery and BSLMC Critical Care programs. Additional post-graduate teaching activities including Board

Review Courses and Yearly Pulmonary, Critical Care and Sleep Medicine Updates are in preparation.

- **Research:** A strong emphasis has been placed on the growth of our clinical and translational research programs. We have recruited scientists in the area of lung injury, fibrosis and asthma. Active efforts to recruit faculty whose research focus on chronic obstructive pulmonary disease (COPD), Cystic Fibrosis, Pulmonary Hypertension and Transplant are ongoing. Substantial resources are being allocated to support our faculties interest in designing and participating in observational and interventional clinical trials. We have launched registries in critical care illness, asthma/COPD, lung transplantation and pulmonary fibrosis; the ultimate goal is to participate in NIH-/Pharma-funded studies and to provide access to cutting-edge treatments to patients affected with chronic lung diseases.
- **Recruitment/Faculty growth:** To address increased demands in critical care medicine and advanced lung disease (cystic fibrosis, pulmonary fibrosis, pulmonary hypertension, asthma/COPD), we have increased the size of our clinical faculty by 20%, the expansion of our clinical services will continue in 2020-2021. Together with growth in our research programs, we anticipate that our pulmonary section will compete with top ranked academic programs in the United States as a destination for cutting-edge clinical care, training and research.

FACULTY

Section Leadership

- David Muigai, M.D.
- Fidaa Shaib, M.D.
- Kalpalatha Guntupalli, M.D.
- Muhammad Asim Siddique, M.D.
- Prasad Manian, M.D.
- Puneet Garcha, M.D.
- Philip Alapat, M.D.
- Rolando Rumbaut, M.D., Ph.D.
- Venkata Bandi, M.D.

Research Faculty

- Mustafa Atik, M.D., Ph.D.
- Aladin Boriek, Ph.D.
- Lindsay Celada, Ph.D.
- Xiaoliang Liang, Ph.D.
- Freddy Romero, Ph.D.
- Konstantin Tsoyi, Ph.D.

Clinician Faculty

Ben Taub Hospital

- Kalpalatha Guntupalli, M.D.
- Philip Alapat, M.D.
- Elizabeth Guy, M.D.
- Nicola Hanania, M.D.
- Muhammad Hayat Syed, M.D.
- Narendra Dharani, M.D.
- Purvesh Patel, M.D.
- Pralay Sarkar, M.D.

Michael E. DeBakey VA Medical Center

- Venkata Bandi, M.D.
- Agrawal Ritwick, M.D.
- Uma Ayyala, M.D.
- Steve Bujarski, M.D.
- Christina Kao, M.D., Ph.D.
- Farrah Kheradmand, M.D.
- Charlie Lan, M.D.

- Donald Ray Lazarus, M.D.
- Shahram Moghtader, M.D.
- Lavannya Pandit, M.D.
- Rolando Rumbaut, M.D., Ph.D.
- Amir Sharafkhaneh, M.D., Ph.D.
- Supriya Singh, M.D.
- Kanta Velamuri, M.D.

Baylor Medicine

- Fidaa Shaib, M.D.
- Edward Hatrick, N.P.
- Ali Jiwani, M.D.
- Minkyung Kwon, M.D.
- Prasad Manian, M.D.
- Dipa Modi, M.D.
- Thomas Monaco, M.D.
- Sara Nowakowski, Ph.D.
- Ivan Rosas, M.D.
- Annise Wilson, M.D.
- David Wu, M.D.

Cystic Fibrosis

- Tara Barto, M.D.

HONORS AND ACHIEVEMENTS

Andrea Braun, M.D.

- Critical Care Faculty of the Year Award by Baylor College of Medicine Critical Care Fellowship

Christina Kao, M.D., Ph.D.

- Houstonia Magazine's Top Docs

Christopher Howard, M.D.

- Outstanding Pulmonary Critical Care Faculty

Dharani Narendra, M.D.

- Early Career Award for Excellence in Patient Care
- Teaching Faculty Award/Consult and Ambulatory

Donald Ray Lazarus, M.D.

- Outstanding Pulmonary/Critical Care Faculty from BCM Pulmonary/Critical Care Fellows 2019-2020

- Sunjay Devarajan, M.D.

Lung Transplant

- Puneet Garcha, M.D.
- Gloria Li, M.D.
- Amit Parulekar, M.D.
- Justin Segraves, M.D.

Baylor St. Luke's Medical Center MICU

- James Herlihy, M.D.
- Jairo Barrantes-Perez, M.D.
- Andrea Braun, M.D.
- Christopher Howard, M.D.
- Babith Mankidy, M.D.
- Christopher Morgan, M.D.
- Ali Omranian, M.D.
- Muhammad Asim Siddique, M.D.
- Sergio Trevino Castillo, M.D.

Pavilion for Women

- David Muigai, M.D.

- Baylor College of Medicine Early Career faculty award

Christopher Morgan, M.D.

- Pulmonary Critical Care Faculty of the Year

Fidaa Shaib, M.D.

- Scholarly Time FTE allocation: Improving Patient Access to Sleep Medicine through Telemedicine: A Feasibility Analysis
- Houstonia Magazine's Top Docs

Kalpalatha Guntupalli, M.D.

- COVID-19 hero award: Gold pin awarded by the General Medicine section of Ben Taub Hospital for contributions to the service during COVID-19 pandemic

Muhammad Siddique, M.D.

- Early Career Award for Excellence in Patient Care
- Scholarly Time FTE allocation: Improving Patient Access to Sleep Medicine through Telemedicine: A Feasibility Analysis
- Houstonia Magazine's Top Docs

Manian Prasad, M.D.

- "That's the Way Award" that recognizes "dedication and exceptional service to our patients" - Baylor College of Medicine, Jan 2020
- "Master Clinician Award," Baylor College of Medicine, 2020

Nicola Hanania, M.D.

- Outstanding Faculty of the Year, Section of Pulmonary and Critical Care, Baylor College of Medicine 2019-2020
- Distinguished CHEST Educator 2019, American College of Chest Physicians

Philip Alapat, M.D.

- Houstonia Magazine's Top Docs

Ritwick Agrawal, M.D.

- Outstanding Sleep Medicine Faculty Award 2019-2020

Sara Nowakowski, Ph.D.

- Early Career Distinguished Achievement Award, Society Behavioral Sleep Medicine
- Sleep Infographic Contest Winner, Sleep Research Society
- Board of Behavioral Sleep Medicine Diplomate in Behavioral Sleep Medicine

Stephen Bujarski, M.D.

- Early Career Award for Excellence in Patient Care

Tara Barto and Puneet Garcha, M.D.

- Membership into the Cystic Fibrosis (CF) Lung Transplant Transition Learning and Leadership Collaborative 3 (CFC LTT LLC3) Program

Uma Ayyala, M.D.

- Graduating Class Outstanding Faculty Award

PROFESSIONAL ORGANIZATIONS/ASSOCIATIONS OFFICES HELD

Donald Ray Lazarus, M.D.

- American College of Physicians (ACP)
- ACCP
- ATS
- AABIP (nominations committee)

Justin Segraves, M.D.

- AOA, GHHS, ACP, CHEST, ATS, SCCM, AST, ISHLT

Kalpalatha Guntupalli, M.D.

- Webinar Committee Member
- American Association of Physicians of Indian Origin 2020

Lavannya Pandit, M.D.

- Texas State Task Force on Maternal Morbidity and Mortality, Appointed 2018 – 2023
- ACCP Women's Health Network Steering Committee 2019-2021
- NIH/NHLBI Respiratory & Integrative Biology Study Section, Early Career Reviewer 2019

Nicola Hanania, M.D.

- Member, Program Committee, CP Assembly, ATS
- Member Education Committee, CHEST
- Member, EAACI Guidelines on Biologics in Severe Asthma

Ritwick Agrawal, M.D.

- Member, Sleep Medicine Network Steering Committee, American College of Chest Physicians

EDITORIAL BOARD MEMBERSHIPS AND EDITORIAL POSITIONS

Donald Ray Lazarus, M.D.

- *Journal of Bronchology and Interventional Pulmonology*
- *American Journal of Respiratory and Critical Care Medicine/Blue Journal*
- *BMC Pulmonary Medicine*
- *Springer Nature Scientific Reports*
- *Turkish Thoracic Journal*
- *Respiratory Medicine*

Kalpalatha Guntupalli, M.D.

- *Indian Journal of Respiratory Care*
- *Indian Journal of Chest Diseases*

Nicola Hanania, M.D.

- Associate Editor, *LUNG*
- Associate Editor, *Current Opinion Pulmonary Medicine*
- Deputy Editor, *Respiratory Medicine*
- Editorial Board, *COPD* (J COPD Foundation)
- Editorial Board, *CHEST*
- Editor, Asthma Section, *Current Opinion Pulmonary Medicine*
- Associate Editor, *Shanghai Chest Hospital Journal*

Puneet Garcha, M.D.

- Editorial board, *The Journal of Heart & Lung Transplantation*

Sara Nowakowski, Ph.D.

- Associate Editor, *SLEEP Advances*

OTHER SIGNIFICANT ACCOMPLISHMENTS

- Drs. Kalpalatha Guntupalli and Pat Herlihy were co-course directors for the First Annual Advances in Critical Care Conference, which was organized by the Department of Surgery and held Sept. 13-14 at Intercontinental Hotel. Also lecturing at the conference were Drs. Christopher Howard, Christopher Morgan, Sergio Trevino Castillo, Christina Kao, and Babith Mankidy.
- Several faculty from the Section of Pulmonary, Critical Care and Sleep Medicine attended the CHEST Annual Meeting 2019, held Oct. 19-23 in New Orleans:
 - Dr. Donald Ray Lazarus was an instructor at the ACCP Fellows' Course on Oct. 19 on tunneled indwelling pleural catheters (see photo).
 - Dr. Babith Mankidy gave a presentation: Use of an Innovative Clinical Decision Support System to Reduce Cardiac Arrest Rates via Early Detection of Decompensation in Patients in Emergency Department and Ward
 - Dr. Ali Jiwani was chair of the session Excessive Dynamic Airway Collapse: An Introduction
 - Dr. Ritwick Agrawal gave two presentations: Personalized Sleep Apnea Therapy and Adherence: Problem based learning session, and Sleep Apnea-Induced Pulmonary Hypertension: It's Nothing to Snore About
 - Dr. Nicola Hanania was chair of/speaker at several satellite symposiums and lectures and had several posters/abstracts presentations throughout the week
 - Dr. Farrah Kheradmand gave a plenary talk on Oct. 20: Impact of e-cigarette use on pulmonary lipid homeostasis and innate immunity.

- Dr. Nicola Hanania was an invited speaker at the GOLD COPD Annual Meeting, hosted by Temple University Nov. 5 in Philadelphia. His talk was “Anxiety, Depression and Fatigue in COPD: Impact and Treatment.”
- Dr. Nicola Hanania was an invited virtual lecturer for the following:
 - Grand Rounds, “Real World Strategies to Improve Asthma Management,” Mercer University School of Medicine, July 29
 - COPD Educator Course, American Lung Association, “Confronting COPD in 2020,” July 29
- Dr. Christopher Howard presented the rollout of a new BSLMC initiative regarding helmet-based noninvasive ventilation to more than 150 national clinical leaders of the CommonSpirit hospital system. The BSLMC initiative serves as the template for the nationwide rollout of helmet-based ventilation for CommonSpirit.
- Dr. Christopher Howard participated on an expert panel for a virtual webinar of ~500 participants hosted by the Society of Critical Care Medicine related to covid-19 and management of acute hypoxemic respiratory failure.
- Dr. Amir Sharafkhaneh was a faculty panelist on the HIGH PERFORMANCE BRAIN. This was an international webinar discussing the effect of health sleep on brain performance.

RESEARCH ACTIVITIES

Grants

Aladin Boriek, Ph.D

- **Grant Title:** RPPR (MPI): Short Term Training to Increase Diversity – HL108853
Funding Agency: National Heart, Lung and Blood Institute (NHLBI)
Role: Principal Investigator
- **Grant Title:** NCE: Exploratory Role of the Cytoskeleton in Anisotropic Regulation of MicroRNAs in Skeletal Muscles – 1714478
Funding Agency: National Science Foundation (NSF)
Role: Principal Investigator
- **Grant Title:** Exploratory Role of the Cytoskeleton in Anisotropic Regulation of MicroRNAs in Skeletal Muscles – 1714478
Funding Agency: National Science Foundation (NSF)
Role: Principal Investigator

Kalpalatha Guntupalli, M.D.

- **Grant Title:** Idiopathic Pulmonary Fibrosis Prospective Outcomes Registry (IPF-PRO) and Chronic Fibrosing Interstitial Lung Disease with Progressive Phenotype Prospective Outcomes (ILD-PRO) Registry
Funding Agency: Boehringer Ingelheim Ltd
Role: Site-Principal Investigator

- **Grant Title:** Idiopathic Pulmonary Fibrosis (IPF) Prospective Outcomes Registry (IPF-PRO, ILD-PRO)
Funding Agency: Duke University
Role: Site Principal Investigator
- **Grant Title:** Functional roles of Nrf2 and NQO1 genetic variants in hyperoxic lung injury-ARDS
Funding Agency: NIH
Role: Co-Investigator

Nicola Hanania, M.D.

- **Grant Title:** Airways Clinical Research Centers (ACRC)
Funding Agency: American Lung Association
Role: Principal Investigator
- **Grant Title:** Project Extension (NCE)- Losartan Effects on Emphysema Progression Trial (LEEP) Trial
Funding Agency: American Lung Association
Role: Principal Investigator
- **Grant Title:** The Genetics Epidemiology of COPD – 2U01-HL089897
Funding Agency: NIH
Role: Principal Investigator
- **Grant Title:** Network Management Core (NEMO) for the Pulmonary Trials Cooperative (PTC) (RETHINC) – 5U01-HL128954-04
Funding Agency: NHLBI
Role: Principal Investigator
- **Grant Title:** Network Management Core (NEMO) for the Pulmonary Trials Cooperative (PTC)/ Insight: Pulmonary Trials Cooperative (PTC) Intervention Study in Overweight Patient with COPD (Insight COPD) Trial – HL128954
Funding Agency: NHLBI
Role: Principal Investigator
- **Grant Title:** A Phase 2B, Randomized, Double-blind, Placebo-controlled, Dose-ranging, Multi-center Study to Evaluate the Efficacy and Safety of GB001 as Maintenance Therapy in Adult Subjects with Moderate to Severe Asthma
Funding Agency: Gossamer Bio
Role: Site-Principal Investigator
- **Grant Title:** A Randomized, Double-blind, Placebo-controlled, Parallel-group, 52-Week Pivotal Study to Assess the Efficacy, Safety, and Tolerability of Dupilumab in Patients with Moderate-to-Severe Chronic Obstructive Pulmonary Disease (COPD) with Type 2 Inflammation
Funding Agency: Sanofi U.S.
Role: Site-Principal Investigator

- **Grant Title:** A 24-Week Multi-center, Double-blind, Placebo Controlled Dose-range Finding Study to Investigate the Efficacy and Safety of Oral QBW251 in COPD Patients on Triple Inhaled Therapy (LABA/LAMA/ICS)
Funding Agency: Novartis Pharmaceuticals Corp
Role: Site-Principal Investigator
- **Grant Title:** A Phase IIA, Multicenter, Randomized, Placebo-controlled, Double-blind Study to Evaluate the Efficacy, Safety, and Pharmacokinetics of MTPS9579A in Patients with Asthma Requiring Inhaled Corticosteroids and a Second Controller
Funding Agency: Genentech, Inc.
Role: Site-Principal Investigator
- **Grant Title:** Asthma BMI Baseline Study (ABBS) Under Master ACRC Network (47412-N2)
Funding Agency: American Lung Association
Role: Principal Investigator
- **Grant Title:** Observational Study in Healthy Subjects and Patients with COPD to Assess the Relationship Between Clinical, Imaging and Biomarker Measurements, and Progression of Emphysema Over Three Years [Footprints]. (Emphysema Progression Biomarker Study)
Funding Agency: Boehringer Ingelheim Pharmaceutical,
Role: Principal Investigator

Farrah Kheradmand, M.D.

- **Grant Title:** Enhancement of Immune Memory Responses to Respiratory Infection - PR140593P1
Funding Agency: Department of Defense Congressionally Directed Medical Research Programs
Role: Principal Investigator
- **Grant Title:** Toxic Effects of E-Cigs Following Transition from Conventional Cigarettes – 5R01-ES029442-02
Funding Agency: NIH
Role: Principal Investigator
- **Grant Title:** Fungal Pathogenesis of Moderate to Severe Asthma – R01A1135803-01
Funding Agency: NIH
Role: Co-Principal Investigator
- **Grant Title:** Mechanism and Function of Let-7, a Novel Modulator of Th17-Dependent Emphysema – R01HL140398-01
Funding Agency: NIH
Role: Co-Principal Investigator
- **Grant Title:** Mariposa: Roche-Genentech - CA42481
Funding Agency: Multicenter Cooperative Trial with Veteran Affairs Medical Center
Role: Principal Investigator - Kheradmand

- **Grant Title:** Innate and Acquired Immune Responses in Human COPD
Funding Agency: Clinical Science Research & Development Merit Review
Role: Principal Investigator
- **Grant Title:** CMA: Pulmonary and Systemic Effects of Deployment Related Particulate Matter Exposures
Funding Agency: Clinical Science Research & Development Merit Review
Role: Co-Principal Investigator

Sara Nowakowski, Ph.D.

- **Grant Title:** Effectiveness of Healthy Sleep Habits for Hospitalized Older Adults to Optimize Rehabilitation – R01NR018342
Funding Agency: NIH – National Institute of Nursing Research Grant
Role: Principal Investigator
- **Grant Title:** Effectiveness of Healthy Sleep Habits for Hospitalized Older Adults to Optimize Rehabilitation
Funding Agency: NIH - National Institute of Aging
Role: Principal Investigator

Lavannya Pandit, M.D.

- **Grant Title:** G6PD Deficiency Predicts Outcomes from COVID-19 Infection amongst Veterans at Highest Risk for Severity of Illness
Funding Agency: Department of Veterans Affairs
Role: Principal Investigator
- **Grant Title:** Neutrophil Exosomes: New Pathogenic Entities in COPD
Funding Agency: Department of Veterans Affairs (Gaggar)
Role: Co-Principal Investigator
- **Grant Title:** EMPACTA: Genentech - ML42528
Funding Agency: Multicenter Cooperative Trial with Veterans Affairs Medical Center
Role: Co-Principal Investigator (Principal Investigator: Trautner)
- **Grant Title:** Mariposa: Roche-Genentech - CA42481
Funding Agency: Multicenter Cooperative Trial with Veteran Affairs Medical Center
Role: Co-Principal Investigator (Principal Investigator - Kheradmand)

Freddy Romero, Ph.D.

- **Grant Title:** Proteasome Degradation of p53 Drives HPS Lung Fibrosis - 1R01HL136833-01A1
Funding Agency: NHLBI, NIH
Role: Principal Investigator

Ivan Rosas, M.D.

- **Grant Title:** Normal Aging Lung Cell Atlas (NALCA) – U01HL145567
Funding Agency: NIH
Role: Co-Investigator

- **Grant Title:** Epithelial Protective Effects of Thyroid Hormone Signaling in Fibrosis – R01HL141852
Funding Agency: NIH
Role: Co-Investigator
- **Grant Title:** Autoantibody- Targeted Therapy for Acute Exacerbations of Idiopathic Pulmonary Fibrosis – U01HL133232
Funding Agency: NIH
Role: Multi Principal Investigator
- **Grant Title:** Research Training in Lung Disease – T32HL00747-24
Funding Agency: NHLBI
Role: Principal Investigator
- **Grant Title:** A Randomized Double-blind, Placebo-controlled Multicenter Study to Evaluate the Safety and Efficacy of Tocilizumab in Patients with Severe COVID-19 Pneumonia (COVACTA)
Funding Agency: Hoffmann La Roche, Inc.
Role: Site-Principal Investigator
- **Grant Title:** A Randomized, Double-blind, Placebo-controlled Phase 2 Study of Safety, Tolerability and Efficacy of Pirfenidone in Patients with Rheumatoid Arthritis Interstitial Lung Disease
Funding Agency: Genentech, Inc.
Role: Overall Principal Investigator
- **Grant Title:** A Phase III, Randomized, Double-blind, Multicenter Study to Evaluate the Efficacy and Safety of Remdesivir Plus Tocilizumab Compared with Remdesivir Plus Placebo in Hospitalized Patients with Severe COVID-19 Pneumonia
Funding Agency: F. Hoffmann-La Roche Ltd
Role: Site-Principal Investigator
- **Grant Title:** Clinical Genetics and Screening for Pulmonary Fibrosis – R01HL130974
Funding Agency: NHLBI
Role: Co-Principal Investigator
- **Grant Title:** Molecular Profiles of Smokers with Subclinical Interstitial Lung Disease – PR171782
Funding Agency: Department of Defense
Role: Principal Investigator

Rolando Rumbaut, M.D., Ph.D.

- **Grant Title:** Collaborative Research Training in Thrombosis and Inflammation – T32HL139425
Funding Agency: NHLBI
Role: Principal Investigator
- **Grant Title:** Ocular Surface Injury: Inflammatory Cascade and Healing of Corneal Wounds – 5R01-EY018239-10

Funding Agency: NIH
Role: Principal Investigator

Konstantin Tsoyi, Ph.D.

- **Grant Title:** Antifibrotic Effects of Syndecan-2 and CD148 in Rheumatoid Arthritis Interstitial Lung Disease – AR074558
- **Funding Agency:** NIH
- **Role:** Principal Investigator

Publications

- Advances in Therapy (IF **3.871**): 1
- Allergy (IF **8.706**): 4
- American Association for the Advancement of Science (IF **41.845**): 1
- American Journal of Kidney Diseases (IF **6.618**): 1
- American Journal of Respiratory Cell and Molecular Biology (IF **5.373**): 4
- American Journal of Respiratory and Critical Care Medicine (IF **17.452**): 10
- American Journal of Translational Research (IF **3.375**): 1
- American Society of Transplantation (IF **7.163**): 1
- Annals of Allergy, Asthma & Immunology (IF **4.969**): 2
- Annals of the American Thoracic Society (IF **4.836**): 1
- Arthritis Rheumatoid (IF **9.586**): 2
- Asthma (IF **1.899**): 1
- Blood Advances (IF **N/A**): 1
- British Psychological Society (IF **N/A**): 1
- Canadian Journal of Respiratory Therapy (IF **0.52**): 4
- Cardiac Failure Review (IF **N/A**): 4
- Chest (IF **9.657**): 12
- Contemporary Clinical Trials (IF **1.832**): 1
- Critical Care Medicine (IF **7.414**): 1
- Current Opinion in Allergy and Clinical Immunology (IF **3.246**): 1
- Current Opinion in Psychology (IF **3.430**): 1
- Current Opinion in Pulmonary Medicine (IF **2.541**): 1
- European Journal of Radiology (IF **3.110**): 11
- European Respiratory Journal (IF **12.339**): 1
- European Society of Emergency Nurses (IF **2.170**): 1
- Federal Practitioner Journal (IF **0.37**): 2
- Frontiers in Oncology (IF **4.250**): 2
- Intensive Care Medicine (IF **17.679**): 1
- International Journal of Molecular Sciences (IF **4.556**): 1
- Indoor Air (IF **4.920**): 1
- Journal for Healthcare Quality (IF **7.226**): 3
- Journal of Allergy and Clinical Immunology (IF **10.228**): 1
- The Journal of Bronchology and Interventional Pulmonology (IF **1.370**): 1
- Journal of Chronic Obstructive Pulmonary Disease (IF **2.500**): 4
- Journal of Clinical Investigation (IF **11.864**): 2
- Journal of Clinical Laboratory Analysis (IF **1.54**): 1
- Journal of Clinical Sleep Medicine (IF **3.586**): 3
- Journal of Fungi (IF **4.621**): 1

- Journal of Immunology (IF **4.886**): 1
- Journal of Neuropsychiatry and Clinical Neurosciences (IF **2.192**): 1
- Journal of Thoracic Disease (IF **2.365**): 9
- Laryngoscope Investigative Otolaryngology (IF **N/A**): 1
- Lung (IF **1.817**) : 1
- Menopause (IF **2.942**): 1
- Nature Communications (IF **12.121**): 2
- Pulmonary Therapy (IF **2.937**): 2
- Respiratory Medicine Case Reports (IF **0.052**): 1
- Sci (IF **N/A**): 1
- Science Translational Medicine (IF **16.304**): 1
- Scientific Reports (IF **3.998**): 1
- Seminars in Immunology (IF **7.120**): 2
- Sensors (IF **3.275**): 1
- Sleep Medicine Clinics (IF **N/A**): 1
- Society of Behavioral Sleep Medicine (IF **3.171**): 2
- Stem Cells and Development (IF **3.082**): 1
- Therapeutic Advances in Chronic Disease (IF **4.79**): 1
- Respiratory Medicine (IF **3.095**): 1
- World Allergy Organization Journal (IF **3.506**): 1
- World Journal of Otorhinolaryngology – Head and Neck Surgery (IF **N/A**): 1

Books and Book Chapters:

Philip Alapat, M.D.

- Manjunath Krupa, Alapat Philip. “Sleep and Dementia.” in *Dementia and Chronic Disease: Management of Comorbid Medical Conditions*. Ed. Catic, Angela. Springer. 2020

Kalpalatha Guntupalli, M.D.

- Massive hemoptysis Review – Aniket Rali, K.Guntupalli – in *Textbook of Emergency Medicine* – Editor Nadagouda Dec 2019
- *Pneumothorax, A Review* – Ahmed Salem, Asim Siddique, Aneesa Bibi, K.Guntupalli – Editor Nadagouda Dec 2019
- Acute severe asthma – Krishi Nunna, Dharani Narendra, K. Guntupalli in *Textbook of Emergency Medicine*
- OPD exacerbation – Orlando Garner, Dharani Narendra, K.Guntupalli love in *Textbook of Emergency Medicine* – Editor Nadagouda Dec 2019

Nicola Hanania, M.D.

- Hanania N.A., Stern J., Looney R.J. Practical Considerations in Management of Allergic Asthma. In: Khurana S., Holguin F. (eds) *Difficult To Treat Asthma*. Respiratory Medicine. Humana, Cham, 2020

Donald Ray Lazarus, M.D.

- Lazarus DR and Eapen GA. “Management of Tracheobronchial Diseases in Critically Ill Cancer Patients.” In: Nates JL and Price KJ eds. *Oncologic Critical Care*. Basel, Switzerland: Springer Nature; 2020

Prasad Manian, M.D.

- Manian P. Lung Infections: An Overview | *Sugarbaker's Adult Chest Surgery, 3e, 2020* | AccessSurgery | McGraw-Hill Medical

Dharani Narendra, M.D.

- Narendra D.K., Cheema A., Hanania N.A. Novel and Alternative Therapies for Asthma in Older Adults. In: Epstein T., Nyenhuis S. (eds) *Treatment of Asthma in Older Adults*. Springer, Cham, 2019

Sara Nowakowski, Ph.D.

- Mundt, J.M., Nowakowski, S., Ong, J.C. (2020). Insomnia evaluation and therapeutic modalities. In: H. Attarian & M. Viola-Saltzman (Eds.), *Sleep Disorders in Women: A Guide to Practical Management, 3rd Edition* (pp. 141-157). Current Clinical Neurology. Switzerland AG: Springer Nature, Humana Press
- Meers, J.M., Stout-Aguilar, J.S., & Nowakowski, S. (2019). Sex differences in sleep health. In: M. Grandner (Ed.), *Sleep and Health*, Academic Press (Elsevier)

Justin Segraves, M.D.

- Segraves JM, Bandi V, Lazarus DR. Chapter 10: Closed pleural biopsy and pleuroscopy. In: Khosla R, ed. *Pleural Effusions: Causes, Types and Treatments*. New York: Nova Science Publishers, Inc.; 2019: 187-199

PRESS

Farrah Kheradmand, M.D.

- Interviewed for Sept. 16 article for CBS Evening News: “New study explores the effects of vaping.” She also was interviewed for a Sept. 13 article for CBS News titled “New research offers clues to the effects of vaping,” a Sept. 13 article in Medical News Today titled “E-cigarette vapors, even without nicotine, may harm lungs,” and a Sept. 16 article in Townhall titled “What’s all the fuss over vaping?”
- Interviewed for a Sept. 18 article in Industry News Coverage titled “Vaping harms the lungs even without nicotine, research shows.” The topic also was covered in a Sept. 9 article in KRWG Public Media titled “New study reveals how vaping hampers the body’s infection-fighting ability”
- Interviewed for a Sept. 25 article in Bloomberg titled “Early signs of vaping health risks were missed or ignored.” She also was quoted for a Sept. 25 article in GK Men titled “Second vaping-related death in Kansas brings nationwide total to nine”
- Interviewed for a Nov. 26 article in Science Magazine titled “How safe is vaping? New human studies assess chronic harm to heart and lungs”
- Interviewed for a May 27 article on *Proto* titled “The case against Vapic.” She was also interviewed for a June 2 newscast on *Wink News* titled “Charlotte teen speaks out after nearly dying from vaping”

Ivan Rosas, M.D.

- Interviewed for an April 30 newscast on KRIV Fox 26 titled “Clinical trial for treatment of patients with severe COVID-19 pneumonia.” The topic also was covered in an April 28 article in Community Impact Newspaper titled “Baylor College of Medicine a research site for clinical trial targeting COVID pneumonia” and an April 28 article in BCM News titled “Clinical trial evaluates Tocilizumab for COVID-19 pneumonia.” He also was interviewed for an April 30 article in Innovation Map titled “These 5 Houston-area research institutions have bright minds at work to battle COVID-19”

Jairo Barrantes-Perez, M.D.

- Interviewed for an Oct. 29 story on Telemundo regarding sleep deprivation and stress management around staying up late for the recent World Series
- Interviewed for a July 21 article in the New York Times called “In Harm’s Way: Fighting the summer surge”

Kanta Velamuri, M.D.

- Interviewed for a May 5 edition of BCM Momentum titled “Healthy Habits: Core exercises, whole grain substitutions help Dr. Kanta Velamuri stay on track”
- Interviewed for a May 15 article in BCM News titled “COVID-19 and women’s health: How to get better sleep during the pandemic”

Kalpalatha Guntupalli, M.D.

- Participated in a COVID – 19 – ICU management – Global seminar on COVID for physicians (3000 attendees) organized by SSIO April 8th, 2020
- COVID – 19 – Do’s and don’t’s for the family and friends of COVID – 19 patients Global; seminar organized by SSIO April 19th, 2020

Muhammad Siddique, M.D.

- Interviewed for an April 23 article in The Score Daily titled “Muhammad Siddique, M.D., a pulmonologist with Baylor College of Medicine”

Nicola Hanania, M.D.

- Interviewed for a Nov. 4 story on KRIV Fox 26 News about Lung Cancer Awareness Month. He also was interviewed for an Oct. 28 article in CHEST Physician titled “Omalizumab results for asthma varied with fixed airflow obstruction, reversibility”
- Interviewed for a Nov. 5 article in Healio titled “Dupilumab reduces severe asthma exacerbations regardless of early improvements in lung function.” The topic also was covered in an Oct. 30 article in Healio titled “Dupilumab benefit persists regardless of age at asthma onset,” an Oct. 28 article in CHEST Physician titled “Omalizumab results for asthma varied with fixed airflow obstruction, reversibility,” and a Nov. 10 article in Medical Dialogues titled “Dupilumab reduces exacerbation in both early and late onset asthma”
- Interviewed for a Jan. 13 article in BCM News titled “Give up smoking and vaping in the new year”

- Interviewed for an Aug. 4 article in Defender titled “Harris Health System’s COVID-19 research contributes to worldwide advances”

Patrick Herlihy, M.D.

- Interviewed on July 2 in the Washington Post titled “As coronavirus cases skyrocket across Texas, hospitals grapple with patient influxes”
- Interviewed for a July 29 article in The Washington Post titled “Young people are infecting older family members in shared homes”

Philip Alapat, M.D.

- Interviewed for an Oct. 15 article in Newsmax Health titled “Dangerous side effects of allergy medications”
- Interviewed for a March 5 article in BCM News titled “How to prepare for Daylight Saving Time”

Ritwick Agrawal, M.D.

- Interviewed for an Oct. 25 article on KTRH Radio News titled “Pop a pill and get smarter!”
- Interviewed for an Oct. 28 article in BCM News titled “Don’t let the Astros keep you from good night’s sleep”
- Interviewed for a Nov. 15 article in SFGate titled “World Series keep you from a good night’s sleep?”

Sara Nowakowski, Ph.D.

- Interviewed for a March 29 article in The Snooze Button titled “Odd bedfellows: Sleep and “menopause with Dr. Sara Nowakowski”

Sunjay Devarajan, M.D.

- Interviewed for a Jan. 13 article in BCM Momentum titled “Healthy Habits: Interval training, portion control key for Dr. Sunjay Devarajan”

Tara Barto, M.D.

- Interviewed for an Oct. 23 article in MedPage Today titled “Oscillating vest keeps COPD patients out of hospital”

EDUCATIONAL ACTIVITIES

Pulmonary and Critical Care Fellowship (3-year combined program): ACGME approved

- Program Director: Phil Alapat M.D.
- Associate Program Directors: Christopher Morgan M.D., Stephen Bujarski M.D.

Critical Care Fellowship (1-2 years): ACGME approved

- Program Director: Kalpalatha Guntupalli M.D.
- Associate Program Directors: Dharani Narendra, M.B., B.S., Andrea Braun, M.D.

Sleep Fellowship: ACGME approved

- Program Director: Phil Alapat M.D.
- Associate Program Director: Supriya Singh, M.D., Ameer Revana D.O.

National Institutes of Health T-32 Training Grant on Lung Diseases:

- Program Director: Ivan O. Rosas, M.D.
- Positions: 5
- Status: Active

2019 – 2020 Fellowship Graduates***Critical Care Medicine***

- Goutham Gudavalli, M.B., B.S.
- Praveen Datar, M.B., B.S.
- Aniket Rali, M.D.

Pulmonary and Critical Care

- Sara Assaf, M.D.
- Ali Cheema, M.D.
- Jose Cuevas, M.D.
- Megan Hughes, M.D.
- Justin Segraves, M.D.

Sleep Medicine

- Aristotle Asis, M.D.
- Maria Isabel Macias, M.D.
- Elizabeth C. Hernandez, M.D.
- Sumith Madhavarapu, D.O.
- Zara Martirosyan, M.D.