

# Respiratory Institute



**Cleveland Clinic**

*Staff Research Interests,  
Publications, and Grants  
2013-14*

## **Introduction**

As part of its mission to deliver outstanding patient care, the Respiratory Institute of the Cleveland Clinic is firmly committed to supporting research that advances our understanding of disease pathogenesis, facilitates the introduction of novel technologies and therapeutic agents, improves outcomes, and optimizes patient safety and the quality of care. Many of our staff members are actively engaged in research activities that span the spectrum from laboratory-based investigation to translational research, epidemiologic studies, clinical trials, and quality improvement projects. These research activities encompass virtually all areas of pulmonary and critical care medicine; major themes include acute lung injury, asthma, alpha-1 antitrypsin deficiency, sarcoidosis, idiopathic pulmonary fibrosis, lung transplantation, pulmonary vascular disease, advanced bronchoscopic techniques, lung cancer, sleep, and neuromuscular disease. Members of the Respiratory Institute participate in many of the major NIH-sponsored collaborative clinical trials networks including ARDSNet, Idiopathic Pulmonary Fibrosis Clinical Research Network, Prevention and Early Treatment of Acute Lung Injury (PETAL), Long Term Oxygen Treatment Trial (LOTT) for COPD, and the Clinical Trials in Organ Transplantation.

This robust and well-funded research enterprise, in conjunction with our high volume, nationally recognized clinical programs, provides fellows with a wealth of opportunity to participate in research projects during their training. To complement the “hands-on” component of research training, all fellows attend an introductory course in clinical biostatistics. Additional opportunities exist for fellows wishing to pursue more advanced course work in biostatistics and clinical research. Our goal is to equip fellows with the skills necessary to pursue a career that includes basic or patient-oriented research, either as a primary investigator or as a collaborator. For those fellows who ultimately follow a purely clinical pathway, this training is no less valuable as it teaches a critical approach to the medical literature and facilitates a greater understanding of the scientific underpinnings of patient care.

## *Research Interests*

**Aboussouan, Loutfi**

My research interests are in neuromuscular disease and in sleep medicine. From a neuromuscular perspective, I have been interested in the role of non-invasive ventilation in patients with ALS and its impact on survival, quality of life and rate of decline of lung function. More recently, I have been evaluating determinants of adherence to noninvasive ventilation that may be specific to the neuromuscular disorders (such as bulbar or cervical involvement). Other interests have included modeling the course of recovery of lung function in patients with diaphragm impairment.

Collaborative projects at the intersection of sleep and pulmonary medicine have been particularly rewarding. These include evaluations of exhaled nitric oxide or end-tidal CO<sub>2</sub> in patients with sleep apnea, with a particular focus on elements of the polysomnogram as potential determinants (such as apnea-hypopnea index, event and inter-event duration). New objective measures of CPAP adherence allow us to accurately assess determinants of compliance with my main interests centering on pulmonary parameters such as hyperinflation. The overlap syndrome (COPD and sleep apnea) is another area of research that combines sleep and pulmonary medicine. Tolerance of noninvasive ventilation or CPAP in such patients has been a topic of recent interest.

**Almeida, Francisco**

Research interests include minimally invasive techniques of staging and diagnosis of lung cancer and other intrathoracic malignancies, quality of lung cancer staging, quality of diagnostic and therapeutic bronchoscopic procedures and bronchoscopy education. Current projects include: the role of EBUS in the diagnosis of lymphoma, safety of general anesthesia for EBUS, role of rigid bronchoscopy dilation for tracheal stenosis, safety of diagnostic and therapeutic bronchoscopy in airway carcinoid, EBUS for the diagnosis and treatment of bronchogenic cysts.

**Aronica, Mark A.**

Our lab focuses on the role of the Extracellular Matrix in asthma. The ECM was once thought to be inert scaffolding, having only a mechanical role in supporting and maintaining tissue structure. However, ECM has been shown to influence the distribution, activation status and survival, as well as adhesion of inflammatory cells and can act as a reservoir for inflammatory mediators and growth factors. The organization of the ECM induced by chronic inflammation may lead to alterations in airway structure and function, a process that has been referred to as remodeling in humans. This is of particular relevance in the asthmatic airways, in which the profile of ECM proteins is altered. Hyaluronan (HA) is an important component of the ECM normally found in adult tissues in small amounts but is present in higher amounts during wound healing. We utilize cell culture models, animal models of asthma, and correlate our findings with human samples to investigate the role of hyaluronan synthases and hyaluronan binding proteins as it relates to HA Synthesis and turnover in the lung and how this impacts inflammation, remodeling, and fibrosis.

**Budev, Marie**

The Cleveland Clinic lung and heart lung transplant program is active in a diverse group of innovative research programs including both multicenter and single center studies. There are many opportunities for fellow research in lung transplantation since it's a relatively new field with many unanswered questions. Below are areas of research

interest for our team at this time some of which fellows can participate in and also we encourage independent fellow projects as well.

One of the key areas of interest for our transplant team is the area of antibody mediated rejection and we were the leading participant in multicenter NIH funded study HLA Antibodies After Lung Transplantation (HALT I) study evaluating long-term outcomes after early development of donor-specific HLA antibodies (DSAs) following lung transplant and the potential benefit of preemptive DSA depletion. Future funding for HALT II focused on treatment of DSA and AMR is currently awaiting funding. Internally, with both our thoracic pathology and immunology partners we are focusing on the long term outcomes of allograft that develop DSA and the variations in the pathology of AMR. In the same arena, we are collaborating with Washington University in St. Louis on this NIH-sponsored trial to determine whether down regulation of autoimmune responses by depletion of autoantibodies to self-antigens prior to lung transplant will prevent primary graft dysfunction and reduce the risk of bronchiolitis obliterans syndrome and further work by our own labs looking at immune mechanism of rejection are continuing.

A second area of interest for our group is cytomegalovirus infection (CMV) and chronic lung allograft dysfunction (CLAD) and we will begin work in the Lung Transplant Clinical Trials Network (LT-CTN) CTOT – NIAID multicenter clinical trial in organ transplantation study which address two of the most important and current graft-limiting problems, cytomegalovirus infection (CMV) and chronic lung allograft dysfunction (CLAD) and aims to gain a better understanding the risks, phenotypes, and mechanisms of CLAD to reduce rates of long-term graft loss

Additional studies that lung transplant program staff are leading or taking part in include:

- A prospective study of the incidence, prevalence and risk factors for neurocognitive impairment in a cohort of lung transplant recipients.
- A multicenter trial assessing gastroesophageal reflux as a contributor to chronic lung allograft rejection
- A single center prospect investigation to determine the utility *pCLE (Probe based confocal laser endomicroscopy)* an optical tool, that allows *in vivo*, microscopic imaging of lung tissue during standard bronchoscopy looking for rejection after transplant

### **Choi, Humberto**

My research interest is focused on lung cancer, particularly in the areas of biomarkers, preoperative evaluation, prediction of clinical outcomes and advanced diagnostic bronchoscopy. I work in collaboration with Cerebrovascular Research Center from the Department of Biomedical Engineering.

Current and future projects include:

- Blood and urine biorespository
- S100B protein as a biomarker for detection of brain metastasis
- Quantitative CT scan analysis for preoperative evaluation of the patient with lung cancer being considered for lung resection.
- Heart rate recovery as a predictor of cardiopulmonary complications after lung resection surgery
- Analysis of clinical outcomes in patients with metachronous second primary lung cancer

**Culver, Daniel**

My research mainly focuses on sarcoidosis and interstitial lung disease. Fellows might be involved in either clinical or experimental research. Prospective clinical research projects that may be feasible include use of corneal confocal microscopy in sarcoidosis, screening for small fiber neuropathy in chronic sarcoidosis, validation of an instrument screening for small fiber neuropathy and the relationship of chronic sarcoidosis to cardiovascular disease using CT and biomarkers.

**Duggal, Abhijit**

My research interests are focused on the clinical epidemiology and outcomes associated with critical illness. My current projects include

1. Prognostic factors and outcomes associated with the development of refractory hypoxemia in Acute Respiratory Distress Syndrome (ARDS).
2. Variables associated with the use of non-conventional “rescue” ventilatory and non-ventilatory strategies in patients with refractory hypoxemia
3. Short and long term outcomes in patients with chronic respiratory diseases undergoing invasive mechanical ventilation
4. Epidemiologic characteristics of critical illness associated with viral pandemics

**Dweik, Raed**

Dr. Dweik’s research program draws on the strengths of the Department of Pulmonary and Critical Care Medicine in the Respiratory Institute (RI) and the Department of Pathobiology in the Lerner Research Institute (LRI). The overall goal of the Dweik lab is to understand lung physiology and pathology through the study of systemic and exhaled biomarkers. The strength of our research comes from its true translational nature and immediate clinical relevance. While our main area of interest is the pathobiology of pulmonary circulation (pulmonary hypertension), our work also covers lung physiology as well as the full spectrum of lung diseases that involve the airway (asthma), and the parenchyma (berylliosis-CBD).

Pulmonary Circulation: We have been conducting translational research in the area of nitric oxide (NO) biology and pulmonary vascular disease for the past 17 years and our current work is focused on the role of NO and the lung matrix (particularly Hyaluronan) in normal lung physiology and in the pathophysiology of pulmonary vascular and airway diseases.

Exhaled Breath Analysis: With each breath we exhale, thousands of molecules are expelled in our breath. Each individual has a “breath-print” that can tell a lot about his or her state of health. Our breath analysis laboratory continues to be at the cutting edge of this new field. Our most recent work focuses on the utility of exhaled breath analysis in the identification and monitoring of lung (pulmonary hypertension, asthma, etc.) and systemic (heart, liver, GI, kidney, etc.) disease.

**Erzurum, Serpil**

The Erzurum lab studies airway inflammatory diseases such as asthma, and pulmonary vascular diseases including pulmonary hypertension. Studies encompass basic science projects in the laboratory, translational projects with human samples, and clinical research trials.

**Hatipoglu, Umur**

- Mechanical ventilation

- Monitoring of work of breathing by utilizing CVP waveform
  - CVP waveform monitoring during weaning
  - Tidal volume variation during unconventional mechanical ventilation
- IgE mediated asthma
  - Variability of total IgE over time in asthmatic patients
- Quality of care metrics
  - Factors that determine pneumonia readmissions in tertiary care center
- Interstitial lung disease
  - Clinical monitoring of interstitial lung disease

### **Heresi Davila, Gustavo**

My research focuses on pulmonary arterial hypertension, particularly in the areas of biomarkers and prediction of clinical outcomes.

There are several potential projects based on our large PH database, for example we are looking into novel clinical predictors of outcome and at the clinical features of patients with borderline pulmonary pressures.

We collect blood samples and we are measuring several novel biomarkers of the disease, like CRP, chemokines and HDL-cholesterol.

We are interested in the role of insulin resistance in pulmonary vascular disease. We have a funded project to begin shortly where we will perform a detailed metabolic profiling of patients with idiopathic PAH.

### **Highland, Kristin**

My area of research interest is rheumatic lung disease, with a focus on interstitial lung disease and pulmonary hypertension in this group of patients. I am also very interested in the pulmonary complications seen in scleroderma. Currently I am looking at clinical outcomes following lung transplant for CTD-lung disease.

### **Hite, R. Duncan**

The overall goal of my research activities is translational research in critical care medicine, and includes the following general areas:

- Cellular/Molecular: studies investigating mechanisms of surfactant injury triggered by acute lung inflammation. In particular, we focus on upregulation of secretory phospholipases and phospholipase-mediated surfactant depletion and dysfunction. Specific diseases of interest include acute lung injury, asthma and more.
- Clinical Trials: Studies are focused on observational interventional studies focused on acute lung injury, sepsis, pneumonia, delirium and more. Current active studies include NIH-funded multicenter trials on ALI (including the ARDS Network), sepsis and pneumonia. The Cleveland Clinic has submitted an application to be a primary site for the NIH-funded PETAL Network which will focus on prevention and early treatment of ALI, and I will serve as the PI if selected. I have had extensive previous experience with studies sponsored by

the pharmaceutical industry, but no trials are currently active due to large number of NIH-funded studies. Involvement in these activities provides excellent opportunities and resources for small ancillary studies that take advantage of databases and clinical samples from each trial.

- **Quality Improvement:** Projects designed to determine optimal approaches to the delivery of care to patients in the ICU using rapid cycle approaches that combine with available Institute statistical and IT resources. Projects in the past have included prevention of VAP, ICU sedation, delirium management, ventilator management, weaning, palliative care and more.

### **Khatri, Sumita**

Research interests include air pollution and health (asthma), health disparities in outcomes and delivery of care for asthma, bronchial thermoplasty for asthma, biomarkers of asthma and airway inflammation, vocal cord dysfunction and asthma.

The USEPA has recently completed an in-depth air quality study on the characteristics and sources of particulate matter (soot) pollution in the area. We are currently collaborating with them on an epidemiologic health study evaluating particulate matter (PM) pollution and presentations for acute asthma (data on acute MI is also available). Geographic information systems (GIS) is used to estimate individual exposures to air pollution prior to their presentations for asthma to determine whether there are patterns of exposure related to such presentations. Ancillary studies from this collaboration are possible.

The Asthma Care Paths have created an opportunity for collaboration in the care of asthma not seen before here at Cleveland clinic. This allows us to get a sense of prior practice patterns, and evaluate how having a more protocolized approach may help patients with asthma and change outcome metrics across the institution. Further, high risk individuals and groups with asthma exist in our community, and best practices for the breaking down of barriers for the care of asthma need to be implemented and evaluated for efficacy.

The Bronchial Thermoplasty and Registry Study proposes the formation of a 3-year registry with evaluation of clinical, physiologic, biologic, and imaging results that may predict clinical response to bronchial thermoplasty in patients with severe refractory asthma.

Dr Claudio Milstein (Voice Center) has a large patient experience with vocal cord dysfunction and breathlessness. We are planning on writing up the Cleveland Clinic Speech Center/Asthma Center experience with these patients, looking for research questions as well.

### **Mazzone, Peter**

Research focus in the lung cancer program would relate to an area of lung cancer that we as pulmonologists play a major role in. These are many, and there are many unanswered questions in these areas, leading to the possibility of a wealth of research. There are opportunities for both clinical and translational research projects.

1. Epidemiology
  - prediction of the risk of developing lung cancer (clinical, genetic, molecular)



- gender differences
- health care disparities
- presentation
- 2. Primary Prevention
  - smoking cessation
  - chemoprevention
- 3. Secondary Prevention (lung cancer screening)
  - imaging programs
  - biomarker development and validation (risk, diagnosis, evaluation of nodules)
- 4. Diagnosis and Staging
  - lung nodule management (imaging advances, biomarker development and validation)
  - bronchoscopic advances
- 5. Pre-operative Evaluation of the Lung Resection Candidate
  - algorithms, other forms of exercise testing
  - development of risk predictor indices
  - guidelines assessment
  - interventions (pulmonary rehab, smoking cessation, etc.)
- 6. Follow-up Post Curative Intent Treatment and Tertiary Prevention
  - no defined protocols for follow-up – imaging, biomarker development and validation
  - outcomes research – surgery, chemo/XRT
  - quality of life
  - chemoprevention

#### **Mehra, Reena**

The research focus of our group involves exploring pathways mediating the relationship between sleep disordered breathing and cardiac electrophysiology as well as cardiovascular disease from a clinical trials and epidemiologic perspective. For over 10 years, we have led and administered several NIH funded and foundation grant projects including a de novo analyses of electrophysiologic signals in large-scale epidemiologic cohorts, the Sleep Heart Health Study and Outcomes of Sleep Disorders in Older Men study, involving thousands of participants with the goal of investigating relationships of sleep apnea and nocturnal cardiac arrhythmias. Our team has also conducted a parallel randomized controlled trial evaluating the effects of sleep apnea treatment on biomarkers of oxidative stress. Recent research efforts have focused on honing in on underlying pathophysiologic mechanisms linking sleep apnea and paroxysmal atrial fibrillation and investigating the longitudinal relationships of polysomnographic and electrophysiologic markers with the development of incident atrial fibrillation. Students, residents and fellows have worked with our research team on various projects including clinical trials design in sleep apnea, predictors of positive airway pressure adherence, prevalence of newly diagnosed insulin resistance in a sleep apnea clinical trial, relationship of central versus obstructive apnea and incident atrial fibrillation and the impact of sleep apnea treatment on biomarkers of systemic inflammation and vascular function. There are opportunities for fellows to examine hypotheses of interest capitalizing on existing clinical and epidemiologic datasets.

#### **Mehta, Atul C.**

1. Endobronchial Volume Reduction
2. Bio-absorbable Endobronchial Stents
3. Diseases of the Central Airways

**Mireles-Cabodevila, Eduardo**

Research interests and projects are:

1. Mechanical ventilation: application, nomenclature, patient-ventilator interaction, prolonged mechanical ventilation.
  - a. I work with simulators to assess ventilator and mode performance.
  - b. I am working on improving the delivery of mechanical ventilation by establishing algorithms that can be used for decision support.
2. Neuromuscular disease: Respiratory muscle involvement, optimizing care, respiratory and ventilator support, diaphragmatic pacing.
  - a. I am working on how to improve respiratory care of these patients, in and outside the hospital.
3. Critical Illness: using simulation to improve performance and education, hemophagocytic syndrome, liver failure.
  - a. I am doing research on the effect of simulation in education and patient outcomes

**Olman, Mitchell**

Our lab works on key aspects of lung injury repair leading to fibrosis. We have ongoing projects that span the gamut from basic biology (with cells and tissue and proteins), to animal models of lung injury and fibrosis, to translational and purely clinical. At the current time we have projects related to mechanotransduction (sensing of matrix stiffness) in fibroblasts and macrophages to blood coagulation and thrombosis in clinical ILD. I am happy to meet with any interested fellow to discuss specifics.

**Scheraga, Rachel**

My research interests as part of Dr. Mitchell Olman's lab are focused on the lung biology of idiopathic pulmonary fibrosis (IPF) and acute lung injury. Specifically, I am studying the role of the transient receptor potential vanilloid (TRPV4) channel in the macrophage. We hope to determine the function of this channel in the macrophage as it could be a potential drug target to treat IPF and other lung diseases.

**Southern, Brian**

My research focus is fibroblast/myofibroblast signaling in idiopathic pulmonary fibrosis (IPF). Specifically, I am interested in what signals drive fibroblast/myofibroblast activation and accumulation in areas of ongoing fibrosis in the lung.

Our lab has developed a novel system that allows us to study the fibroblast-matrix interactions in normal and fibrotic lung tissue. With this model, we have shown that fibroblasts preferentially adhere to fibrotic lesions, become immotile, and differentiate into myofibroblasts. Myosin II appears to be a critical molecule which can perform different functions depending on whether the fibroblast is interacting with normal or fibrotic lung. I am currently working on better defining this mechanism and exploring ways to manipulate myosin II activity to interrupt the fibroproliferative cycle.

Opportunities are always available in Dr. Mitch Olman's laboratory for fellows interested in basic science or translational research in IPF.

**Stoller, James**

Research interests regard alpha-1 antitrypsin deficiency, health care delivery of respiratory care services, the impact and outcomes of education, leadership development activities, and optimal educational strategies (e.g., in simulation, etc.). The experience of collaborating with me will offer experience perspectives on clinical research design as well as the mechanics of writing, submitting, and editing research papers.

I am also absolutely available to fellows to help them prepare reviews of clinical issues and on academic mentorship issues.

**Tonelli, Adriano**

Research interests include the study of systemic vascular function and hemodynamics including invasive and non-invasive cardiac output determinations in pulmonary vascular diseases. I am particularly interested in the study of pulmonary hypertension in patients with liver diseases. In addition, I am attracted to perform electro or echocardiographic studies in patients with a variety of lung diseases.

**Valapour, Maryam**

In my research I focus on the study of public policies as they relate to organ transplantation. My current projects fall under two major categories: 1) study of US lung transplant policies and their impact on US transplant allocation, clinical practice and outcomes; and 2) study of policies of informed consent in organ donor and recipient populations. Currently I serve as the Senior Investigator for Lung Transplant for the Scientific Registry of Transplant Recipient (SRTR). In this role, I work with a team to analyze the US lung transplant data to answer questions about how to best allocate organs to improve the efficiency of the US lung transplant system; and study outcomes for US transplant candidates and recipients. This year, we will initiate projects to study various patient outcomes in the Cleveland Clinic lung transplant program.

**Zein, Joe**

Research interests include airway diseases. I have been involved in a project analyzing the SARP database to investigate the role of aging on asthma control. The goal is to describe asthma severity and control during the life course of individuals, as well as the role of gender and the hormonal milieu. I am also interested in cost effectiveness, clinical decision analysis and the cost of illness.

*Selected Publications*  
*2013-2014*

**Aboussouan, Loutfi**

**Journal Publications:**

Kaw R, Argalious M, Aboussouan L, Chung F. Obesity hypoventilation syndrome and anesthesia considerations. **Sleep Med Clin** 2014 (in press) DOI: 10.1016/j.jsmc.2014.05.005

Hatipoglu U, Aboussouan LS. Chronic obstructive pulmonary disease: An update for the primary physician. **Cleve Clin J Med**. 2014;81(6):373-383.

Theerakittikul T, Hatipoglu U, Aboussouan LS. Hyperinflation on Chest Radiograph as a Marker of Low Adherence to Positive Airway Pressure Therapy in the Overlap Syndrome. **Respir Care**. 2014;59(8):1267-1274.

Aboussouan LS, Mireles-Cabodevila E. Respiratory support in patients with myotrophic lateral sclerosis. **Respir Care**. 2013;58(9):1555-1558.

Chua AP, Aboussouan LS, Minai OA, Paschke K, Laskowski D, Dweik RA. Long-term continuous positive airway pressure therapy normalizes high exhaled nitric oxide levels in obstructive sleep apnea. **J Clin Sleep Med**. 2013;9(6):529-535.

Jaimcharyatam N, Dweik RA, Kaw R, Aboussouan LS. Polysomnographic determinants of nocturnal hypercapnia in patients with sleep apnea. **J Clin Sleep Med**. 2013;9(3):209-215.

**Book Chapters:**

Aboussouan LS. Obstructive lung disease: Asthma and chronic obstructive pulmonary disease. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. *The Cleveland Clinic Foundation Intensive Review of Internal Medicine*. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 35. p. 202-204.

Aboussouan LS. Respiratory failure and the need for ventilatory support. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. *Egan's Fundamentals of Respiratory Care*. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 41. p. 989-1005.

Stoller JK, Lacbawan FL, Aboussouan LS. Alpha-1 Antitrypsin Deficiency. 2006 Oct 27 [Updated 2014 May 1]. In: Pagon RA, Adam MP, Ardinger HH, et al., editors. *GeneReviews®* [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2014. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK1519/>

**Alappan, Narendrakumar**

**Journal Publications:**

Alappan N, Marak CP. Lung point: not for everyone. **Chest**. 2013 Jun;143(6):1837-1838.

Alappan N, Marak CP, Chopra A, Joy PS, Dorokhova O, Guddati AK. Renal medullary cancer in a patient with sickle cell trait. **Case Rep Oncol Med**. 2013;2013:129813.

Marak CP, Alappan N, Shim C, Guddati AK. Diffuse alveolar hemorrhage due to ketorolac tromethamine. **Pharmacology**. 2013;92(1-2):11-13.

Marak CP, Chopra A, Alappan N, Ponea AM, Guddati AK. Ovarian hyperstimulation syndrome as an etiology of obstructive uropathy. **Case Rep Obstet Gynecol**. 2013;2013:653704.

Marak CP, Ponea AM, Alappan N, Shaheen S, Guddati AK. Uterine leiomyosarcoma manifesting as a tricuspid valve mass. **Case Rep Oncol**. 2013 Jan;6(1):119-126.

Marak CP, Alappan N, Chopra A, Dorokhova O, Sinha S, Guddati AK. Uterine sarcoidosis: a rare extrapulmonary site of sarcoidosis. **Case Rep Rheumatol**. 2013;2013:706738.

### **Almeida, Francisco**

#### **Journal Publications:**

Ha D, Choi H, Almeida FA, Arrossi A, Brainard J, Cicienia J, Farver C, Gildea T, Machuzak MS, Mazzone P. Histologic and molecular characterization of lung cancer with tissue obtained by electromagnetic navigation bronchoscopy. **J Bronchology Interv Pulmonol** 2013; 20(1):10-15

Ribeiro Neto M, Hoffman S, Almeida FA. Unexpected bronchial anatomy lesson. **Am J Respir Crit Care Med** 2013; 187(4):e7-8

Casal RF, Iribarren J, Eapen G, Ost D, Morice RC, Lan C, Cornwell L, Almeida FA, Grossu H, Jimenez CA. Safety and effectiveness of microdebrider bronchoscopy for the management of central airway obstruction. **Respirology** 2013; 18(6):1011-1015

Lee HJ, Feller-Kopman D, Shepherd RW, Almeida FA, Bechara R, Berkowitz D, Chawla M, Haas A, Gillespie C, Lee R, Majit A, Malhotra R, Musani A, Puchalski J, Sterman D, Yarmus L. Validation of an interventional pulmonary examination. **Chest** 2013; 143(6):1667-1670

Grossu H, Eapen G, Morice RC, Jimenez CA, Casal RF, Lan C, Cornwell L, Almeida FA, Sarkiss M, Ost D. Stents Are Associated with Increased Risk of Respiratory Infections in Patients Undergoing Airway Interventions for Malignant Airway Disease. **Chest** 2013; 144(2):441-449

Almeida F, Casal R, Jimenez C, Eapen G, Uzbek M, Sarkiss M, Rice, D, Morice R, Ost D. Quality gaps and comparative effectiveness in lung cancer staging: the impact of test sequencing on outcomes. **Chest** 2013; 144(6):1776-1782

Minca EC, Lanigan CP, Reynolds JP, Wang Z, Ma PC, MD, Cicienia J, Almeida FA, Pennell NA, Tubbs RR. ALK Status testing in non-small-cell lung carcinoma by FISH on thinprep slides with cytology material. **J Thorac Oncol** 2014;9: 464-468

### **Aronica, Mark**

#### **Journal Publications:**

Ratanamaneechat S, Neumann DR, DiFilippo FP, Comhair SAA, Asosingh K, Ghosh S, Grandon D, Khan A, Aronica MA, Erzurum SC. Redox imaging of inflammation in asthma. **Am J Respir Crit Care Med**. 2014 Mar 15;189(6):743-746.

Asosingh K, Cheng G, Xu W, Savasky BM, Aronica MA, Li X, Erzurum SC. Nascent endothelium initiates th2 polarization of asthma. **J Immunol**. 2013 Apr 1;190(7):3458-3465

Swaidani S, Cheng G, Lauer ME, Sharma M, Mikecz K, Hascall VC, Aronica MA. TSG-6 protein is crucial for the development of pulmonary hyaluronan deposition, eosinophilia, and airway hyperresponsiveness in a murine model of asthma. **J Biol Chem**. 2013 Jan 4;288(1):412-422.

Lauer ME, Cheng G, Swaidani S, Aronica MA, Weigel PH, Hascall VC. Tumor necrosis factor-stimulated gene-6 (TSG-6) amplifies hyaluronan synthesis by airway smooth muscle cells. **J Biol Chem**. 2013 Jan 4;288(1):423-431.

Cheng G, Swaidani S, Sharma M, Lauer ME, Hascall VC, Aronica MA. Correlation of hyaluronan deposition with infiltration of eosinophils and lymphocytes in a cockroach-induced murine model of asthma. **Glycobiology**. 2013 Jan;23(1):43-58.

#### **Ashton, Rendell**

##### **Journal Publications:**

Wiesen J, Ornstein M, Tonelli AR, Menon V, Ashton RW. State of the evidence: Mechanical ventilation with PEEP in patients with cardiogenic shock. **Heart**. 2013 Dec;99(24):1812-1817.

Taliercio RM, Ashton RW, Horwitz L, Swanson KC, Wendt PC, Hoyer JD, Oliveira JL. Hb Grove City [ $\beta$ 38(C4)Thr-->Ser, ACC>AGC; HBB: c.116C>G]: A new low oxygen affinity  $\beta$  chain variant. **Hemoglobin**. 2013;37(4):396-403.

Ashton RW, Mehta AC, Prakash UBS. One journal's odyssey to indexing: How JOBIP made it into MEDLINE. **J Bronchology Interv Pulmonol**. 2013 Apr;20(2):101-102.

#### **Budev, Marie**

##### **Journal Publications:**

Deshpande A, Pasupuleti V, Mossad SB, Budev M, Schmitt SK, Corey R, Eghtesad B, Mawhorter SD, Hernandez AV, Jain A, Avery RK. Use of lactobacillus in prevention of recurrences of Clostridium difficile infection in solid organ transplant recipients. **Infect Dis Clin Pract (Baltim Md)**. 2013;21(5):292-298.

Pettersson GB, Karam K, Thuita L, Johnston DR, McCurry KR, Kapadia SR, Budev MM, Avery RK, Mason DP, Murthy SC, Blackstone EH. Comparative study of bronchial artery revascularization in lung transplantation. **J Thorac Cardiovasc Surg**. 2013 Oct;146(4):894-900.

Tiriveedhi V, Gautam B, Sarma NJ, Askar M, Budev M, Aloush A, Hachem R, Trulock E, Myers B, Patterson AG, Mohanakumar T. Pre-transplant antibodies to  $\alpha$ 1 tubulin and collagen-V in lung transplantation: Clinical correlations. **J Heart Lung Transplant**. 2013 Aug;32(8):807-814.

Kumar D, Budev M, Koval C, Hellinger WC, Gordon SM, Tomford JW. Donor-derived tuberculosis (TB) infection in lung transplant despite following recommended algorithm. **Am J Transplant**. 2013 Aug;13(8):2225-2226.

Wehbe E, Duncan AE, Dar G, Budev M, Stephany B. Recovery from AKI and short-and long-term outcomes after lung transplantation. **Clin J Am Soc Nephrol**. 2013 Jan;8(1):19-25.

**Choudhary, Chirag**

**Journal Publications:**

Narula T, Raman D, Wiesen J, Choudhary C, Reddy AJ, Moghekar A. A patient with acute COPD exacerbation and shock. **Chest**. 2013 Dec 1;144(6):e1-e3.

Wiesen J, Raman D, Adams J, Choudhary C, Moghekar A. A patient with lung cancer presenting with respiratory failure and shock. **Chest**. 2013 Jul 1;144(1):e1-e4.

Choudhary C, Bandyopadhyay D, Salman R, Gildea T, Mehta A. Broncho-vascular fistulas from self-expanding metallic stents: A retrospective case review. **Ann Thorac Med**. 2013 Apr;8(2):116-120.

**Choi, Humberto**

**Journal Publications:**

Ha D, Choi H, Almeida FA, Arrossi A, Brainard J, Cicensia J, Farver C, Gildea T, Machuzak MS, Mazzone P. Histologic and molecular characterization of lung cancer with tissue obtained by electromagnetic navigation bronchoscopy. *J Bronchology Interv Pulmonol* 2013; 20(1):10-5.

Choi H, Mazzone P. Radon and Lung cancer. *Cleveland Clinic Journal of Medicine*. Sept 2014 (in press)

**Book Chapters:**

Choi H, Mazzone P, Mehta AC. Lung cancer. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. *The Cleveland Clinic Foundation Intensive Review of Internal Medicine*. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 34. p. 200-201.

**Cicensia, Joe**

**Journal Publications:**

Mehta AC, Cicensia J. ROSEs are read. **Chest**. 2014 Jan 1;145(1):7-9.

Venkatappa N, Fadul R, Raymond D, Cicensia J, Gildea TR. Endobronchial valves for treatment of bronchopleural fistula in granulomatous polyangitis: a longitudinal case report. **J Bronchology Interv Pulmonol**. 2013 Apr;20(2):186-188.

Ha D, Choi H, Almeida FA, Arrossi A, Brainard J, Cicensia J, Farver C, Gildea T, Machuzak MS, Mazzone P. Histologic and molecular characterization of lung cancer with tissue obtained by electromagnetic navigation bronchoscopy. **J Bronchology Interv Pulmonol**. 2013 Jan;20(1):10-15.



### **Book Chapters:**

Gildea TR, Cicienia J. Electromagnetic navigation bronchoscopy. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 6. p. 107-120.

Sethi S, Cicienia J. EBUS-TBNA bronchoscopy. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 5. p. 85-106.

### **Culver, Daniel**

#### **Journal Publications:**

Baughman RP, Culver DA, Cordova FC, Padilla M, Gibson KF, Lower EE, Engel PJ. Bosentan for sarcoidosis-associated pulmonary hypertension: a double-blind placebo controlled randomized trial. **Chest**. 2014 Apr 1;145(4):810-817.

Sohn M, Culver DA, Judson MA, Scott TF, Tavee J, Nozaki K. Spinal cord neurosarcoidosis. **Am J Med Sci**. 2014 Mar;347(3):195-198.

Culver DA, Costabel U. EBUS-TBNA for the diagnosis of sarcoidosis: Is it the only game in town? **J Bronchology Interv Pulmonol**. 2013 Jul;20(3):195-197.

Richmond BW, Ploetze K, Isom J, Chambers-Harris I, Braun NA, Taylor T, Abraham S, Mageto Y, Culver DA, Oswald-Richter KA, Drake WP. Sarcoidosis Th17 cells are ESAT-6 antigen specific but demonstrate reduced IFN-gamma expression. **J Clin Immunol**. 2013 Feb;33(2):446-455.

Ribeiro Neto ML, Swigris JJ, Culver DA. Idiopathic pulmonary fibrosis or not: antibiotic prophylaxis for all patients on immunosuppressants. **Thorax**. 2013 Sep;68(9):883-884.

Culver DA. What is sarcoidosis? **Respir Med**. 2013 Sep;107(9):1285-1286.

Oswald-Richter KA, Richmond BW, Braun NA, Isom J, Abraham S, Taylor TR, Drake JM, Culver DA, Wilkes DS, Drake WP. Reversal of global CD4+ subset dysfunction is associated with spontaneous clinical resolution of pulmonary sarcoidosis. **J Immunol**. 2013 Jun 1;190(11):5446-5453.

Mira-Avendano IC, Parambil JG, Yadav R, Arrossi V, Xu M, Chapman JT, Culver DA. A retrospective review of clinical features and treatment outcomes in steroid-resistant interstitial lung disease from polymyositis/dermatomyositis. **Respir Med**. 2013 Jun;107(6):890-896.

Julian MW, Shao G, Schlesinger LS, Huang Q, Cosmar DG, Bhatt NY, Culver DA, Baughman RP, Wood KL, Crouser ED. Nicotine treatment improves Toll-like receptor 2 and Toll-like receptor 9 responsiveness in active pulmonary sarcoidosis. **Chest**. 2013 Feb 1;143(2):461-470.

### **Duggal, Abhijit**

#### **Journal Publications:**

Golan E, Barrett K, Alali AS, Duggal A, Jichici D, Pinto R, Morrison L, Scales DC. Predicting neurologic outcome after targeted temperature management for cardiac arrest: systematic review and meta-analysis. Crit Care Med. 2014 Aug;42(8):1919-30.

Duggal A, Salam S, Mehta A. Refractory hypoxemia due to sodium polystyrene sulfonate (kayexalate) aspiration. **Ann Am Thorac Soc**. 2014 Jul;11(6):993-5.

Arora Z, Duggal A. Cannonball metastatic lesions in a young male: A case report. **World J Oncol**. 2014 Apr;5(2):93-95.

Duggal A, Perez P, Golan E, Tremblay L, Sinuff T. Safety and efficacy of noninvasive ventilation in patients with blunt chest trauma: a systematic review. **Crit Care**. 2013 Jul 22;17(4):R142.

### **Dweik, Raed**

#### ***Journal Publications:***

Navaneethan SD, Wehbe E, Heresi GA, Gaur V, Minai OA, Arrigain S, Nally JV, Jr., Schold JD, Rahman M, Dweik RA. Presence and outcomes of kidney disease in patients with pulmonary hypertension. **Clin J Am Soc Nephrol**. 2014 May;9(5):855-863.

Heresi GA, Aytekin M, Hammel JP, Wang S, Chatterjee S, Dweik RA. Plasma interleukin-6 adds prognostic information in pulmonary arterial hypertension. **Eur Respir J**. 2014 Mar;43(3):912-914.

Dababneh L, Cikach F, Alkukhun L, Dweik RA, Tonelli AR. Sublingual microcirculation in pulmonary arterial hypertension. **Ann Am Thorac Soc**. 2014 May;11(4):504-512.

Lauer ME, Aytekin M, Comhair SA, Loftis J, Tian L, Farver CF, Hascall VC, Dweik RA. Modification of hyaluronan by heavy chains of inter- $\alpha$ -inhibitor in idiopathic pulmonary arterial hypertension. **J Biol Chem**. 2014 Mar 7;289(10):6791-6798.

Cikach FS, Jr., Tonelli AR, Barnes J, Paschke K, Newman J, Grove D, Dababneh L, Wang S, Dweik RA. Breath analysis in pulmonary arterial hypertension. **Chest**. 2014 Mar;145(3):551-558.

Tonelli AR, Dweik RA. Why patients who die of worsening pulmonary arterial hypertension are not on parenteral prostacyclin analog treatment? **J Heart Lung Transplant**. 2014 Feb;33(2):221.

Tonelli AR, Dweik RA. Macitentan and pulmonary arterial hypertension. **N Engl J Med**. 2014 Jan 2;370(1):81-82.

Hanouneh IA, Zein NN, Cikach F, Dababneh L, Grove D, Alkhouri N, Lopez R, Dweik RA. The breathprints in patients with liver disease identify novel breath biomarkers in alcoholic hepatitis. **Clin Gastroenterol Hepatol**. 2014 Mar;12(3):516-523.

Alkhouri N, Cikach F, Eng K, Moses J, Patel N, Yan C, Hanouneh I, Grove D, Lopez R, Dweik R. Analysis of breath volatile organic compounds as a noninvasive tool to diagnose nonalcoholic fatty liver disease in children. **Eur J Gastroenterol Hepatol**. 2014 Jan;26(1):82-87.

Alkukhun L, Bair ND, Dweik RA, Tonelli AR. Subcutaneous to intravenous prostacyclin analog transition in pulmonary hypertension. **J Cardiovasc Pharmacol**. 2014 Jan;63(1):4-8.

Tonelli AR, Alkukhun L, Arelli V, Ramos J, Newman J, McCarthy K, Pichurko B, Minai OA, Dweik RA. Value of impedance cardiography during 6-minute walk test in pulmonary hypertension. **Clin Transl Sci**. 2013 Dec;6(6):474-480.

Tonelli AR, Arelli V, Minai OA, Newman J, Bair N, Heresi GA, Dweik RA. Causes and circumstances of death in pulmonary arterial hypertension. **Am J Respir Crit Care Med**. 2013 Aug 1;188(3):365-369.

Cumbo-Nacheli G, Tonelli A, Dweik RA. Effect of pneumonectomy on pulmonary artery pressure and right ventricular function. **Chirurgia (Turin, Italy)**. 2013 Apr;26(2):73-78.

Chua AP, Aboussouan LS, Minai OA, Paschke K, Laskowski D, Dweik RA. Long-term continuous positive airway pressure therapy normalizes high exhaled nitric oxide levels in obstructive sleep apnea. **J Clin Sleep Med**. 2013;9(6):529-535.

Tonelli AR, Yadav R, Gupta A, Arrossi AV, Heresi GA, Dweik RA. Spleen size in idiopathic and heritable pulmonary arterial hypertension. **Respiration**. 2013;85(5):391-399.

Kalay N, Elcik D, Canatan H, Kaya MG, Yarlioglues M, Oguzhan A, Dweik RA, Aytekin M. Elevated plasma hyaluronan levels in pulmonary hypertension. **Tohoku J Exp Med**. 2013;230(1):7-11.

Tonelli AR, Dweik RA. Response [Diastolic dysfunction with nondilated left atrium]. **Chest**. 2013 Jan;143(1):273-274.

Samara MA, Tang WHW, Cikach F, Jr., Gul Z, Tranchito L, Paschke KM, Viterna J, Wu Y, Laskowski D, Dweik RA. Single exhaled breath metabolomic analysis identifies unique breathprint in patients with acute decompensated heart failure. **J Am Coll Cardiol**. 2013 Apr 2;61(13):1463-1464.

Jaimcharyatam N, Dweik RA, Kaw R, Aboussouan LS. Polysomnographic determinants of nocturnal hypercapnia in patients with sleep apnea. **J Clin Sleep Med**. 2013;9(3):209-215.

Minai OA, Parambil J, Dweik RA, Davila GH, Peterson L, Rollins KD, Chen H. Impact of switching from epoprostenol to IV treprostinil on treatment satisfaction and quality of life in patients with pulmonary hypertension. **Respir Med**. 2013 Mar;107(3):458-465.

Farha S, Laskowski D, George D, Park MM, Tang WHW, Dweik RA, Erzurum SC. Loss of alveolar membrane diffusing capacity and pulmonary capillary blood volume in pulmonary arterial hypertension. **Respir Res**. 2013;14:6.

#### **Book Chapters:**

Ramaswamy A, Dweik RA, Mehta AC. Pleural diseases. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. The Cleveland Clinic Foundation Intensive Review of

Internal Medicine. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 37. p. 207-209.

Dweik RA. Plate 3-20. Exhaled breath analysis. In: Kaminsky DA, ed. *The Netter Collection of Medical Illustrations. Volume 3, Respiratory System*. 2nd ed. Philadelphia, PA: Elsevier Saunders; 2011. p. 101.

Tonelli AR, Arroliga AC, Dweik RA. Pulmonary vascular disease. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. *Egan's Fundamentals of Respiratory Care*. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 26. p. 580-598

Diaz-Guzman E, Dweik RA, Stoller JK. Obstructive lung disease: Chronic obstructive pulmonary disease (COPD), asthma, and related diseases. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. *Egan's Fundamentals of Respiratory Care*. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 23. p. 525-548.

### **Erzurum, Serpil**

#### **Journal Publications:**

Wu W, Bleecker E, Moore W, Busse WW, Castro M, Chung KF, Calhoun WJ, Erzurum S, Gaston B, Israel E, Curran-Everett D, Wenzel SE. Unsupervised phenotyping of Severe Asthma Research Program participants using expanded lung data. **J Allergy Clin Immunol**. 2014 May;133(5):1280-1288.

Ortega VE, Hawkins GA, Moore WC, Hastie AT, Ampleford EJ, Busse WW, Castro M, Chardon D, Erzurum SC, Israel E, Montealegre F, Wenzel SE, Peters SP, Meyers DA, Bleecker ER. Effect of rare variants in ADRB2 on risk of severe exacerbations and symptom control during longacting beta agonist treatment in a multiethnic asthma population: a genetic study. **Lancet Respir Med**. 2014 Mar;2(3):204-213.

Busse WW, Erzurum SC, Blaisdell CJ, Noel P. Executive summary: NHLBI workshop on the primary prevention of chronic lung diseases. **Ann Am Thorac Soc**. 2014 Apr;11 Suppl 3:S123-S124.

Ratanamaneechat S, Neumann DR, DiFilippo FP, Comhair SAA, Asosingh K, Ghosh S, Grandon D, Khan A, Aronica MA, Erzurum SC. Redox imaging of inflammation in asthma. **Am J Respir Crit Care Med**. 2014 Mar 15;189(6):743-746.

Wysocki K, Park SY, Bleecker E, Busse W, Castro M, Chung KF, Gaston B, Erzurum S, Israel E, Teague WG, Moore CG, Wenzel S. Characterization of factors associated with systemic corticosteroid use in severe asthma: Data from the Severe Asthma Research Program. **J Allergy Clin Immunol**. 2014 Mar;133(3):915-918.

Tuder RM, Archer SL, Dorfmueller P, Erzurum SC, Guignabert C, Michelakis E, Rabinovitch M, Schermuly R, Stenmark KR, Morrell NW. Relevant issues in the pathology and pathobiology of pulmonary hypertension. **J Am Coll Cardiol**. 2013 Dec 24;62(25 Suppl):D4-D12.

Wechsler ME, Laviolette M, Rubin AS, Fiterman J, Lapa E Silva JR, Shah PL, Fiss E, Olivenstein R, Thomson NC, Niven RM, Pavord ID, Simoff M, Hales JB, McEvoy C, Slebos DJ, Holmes M, Phillips MJ, Erzurum SC, Hanania NA, Sumino K, Kraft M, Cox G, Sterman DH, Hogarth K, Kline JN, Mansur AH, Louie BE, Leeds WM, Barbers RG,

Austin JHM, Shargill NS, Quiring J, Armstrong B, Castro M. Bronchial thermoplasty: Long-term safety and effectiveness in patients with severe persistent asthma. **J Allergy Clin Immunol**. 2013 Dec;132(6):1295-1302.

Lundgrin EL, Janocha AJ, Koch CD, Gebremedhin A, Di Rienzo A, Alkorta-Aranburu G, Brittenham GM, Erzurum SC, Beall CM. Plasma hepcidin of Ethiopian highlanders with steady-state hypoxia. **Blood**. 2013 Sep 12;122(11):1989-1991.

Patel M, Predescu D, Tandon R, Bardita C, Pogoriler J, Bhorade S, Wang M, Comhair S, Ryan-Hemnes A, Chen J, Machado R, Husain A, Erzurum S, Predescu S. A novel p38 mitogen-activated protein kinase/Elk-1 transcription factor-dependent molecular mechanism underlying abnormal endothelial cell proliferation in plexogenic pulmonary arterial hypertension. **J Biol Chem**. 2013 Sep 6;288(36):25701-25716.

Li X, Hawkins GA, Ampleford EJ, Moore WC, Li H, Hastie AT, Howard TD, Boushey HA, Busse WW, Calhoun WJ, Castro M, Erzurum SC, Israel E, Lemanske RF, Jr., Szefer SJ, Wasserman SI, Wenzel SE, Peters SP, Meyers DA, Bleecker ER. Genome-wide association study identifies TH1 pathway genes associated with lung function in asthmatic patients. **J Allergy Clin Immunol**. 2013 Aug;132(2):313-320.

Herjan T, Yao P, Qian W, Li X, Liu C, Bulek K, Sun D, Yang WP, Zhu J, He A, Carman JA, Erzurum SC, Lipshitz HD, Fox PL, Hamilton TA, Li X. HuR is required for IL-17-induced Act1-mediated CXCL1 and CXCL5 mRNA stabilization. **J Immunol**. 2013 Jul 15;191(2):640-649.

Rao CK, Moore CG, Bleecker E, Busse WW, Calhoun W, Castro M, Chung KF, Erzurum SC, Israel E, Curran-Everett D, Wenzel SE. Characteristics of perimenstrual asthma and its relation to asthma severity and control: data from the severe asthma research program. **Chest**. 2013 Apr 1;143(4):984-992.

Lundgrin EL, Park MM, Sharp J, Tang WHW, Thomas JD, Asosingh K, Comhair SA, DiFilippo FP, Neumann DR, Davis L, Graham BB, Tudor RM, Dostanic I, Erzurum SC. Fasting 2-deoxy-2-[18F]fluoro-D-glucose positron emission tomography to detect metabolic changes in pulmonary arterial hypertension hearts over 1 year. **Ann Am Thorac Soc**. 2013 Feb;10(1):1-9.

Ghelfi E, Yu CW, Elmasri H, Terwelp M, Lee CG, Bhandari V, Comhair SA, Erzurum SC, Hotamisligil GS, Elias JA, Cataltepe S. Fatty acid binding protein 4 regulates VEGF-induced airway angiogenesis and inflammation in a transgenic mouse model: Implications for asthma. **Am J Pathol**. 2013 Apr;182(4):1425-1433.

Asosingh K, Cheng G, Xu W, Savasky BM, Aronica MA, Li X, Erzurum SC. Nascent endothelium initiates Th2 polarization of asthma. **J Immunol**. 2013 Apr 1;190(7):3458-3465

Yu J, Taylor L, Wilson J, Comhair S, Erzurum S, Polgar P. Altered expression and signal transduction of endothelin-1 receptors in heritable and idiopathic pulmonary arterial hypertension. **J Cell Physiol**. 2013 Feb;228(2):322-329.

Holguin F, Comhair SAA, Hazen SL, Powers RW, Khatri SS, Bleecker ER, Busse WW, Calhoun WJ, Castro M, Fitzpatrick AM, Gaston B, Israel E, Jarjour NN, Moore WC,

Peters SP, Teague WG, Chung KF, Erzurum SC, Wenzel SE. An association between L-arginine/asymmetric dimethyl arginine balance, obesity, and the age of asthma onset phenotype. **Am J Respir Crit Care Med**. 2013 Jan 15;187(2):153-159..

Farha S, Lundgrin EL, Erzurum SC. Novel therapeutic approaches to preserve the right ventricle. **Curr Heart Fail Rep**. 2013 Mar;10(1):12-17.

Farha S, Laskowski D, George D, Park MM, Tang WHW, Dweik RA, Erzurum SC. Loss of alveolar membrane diffusing capacity and pulmonary capillary blood volume in pulmonary arterial hypertension. **Respir Res**. 2013;14:6.

Ghosh S, Willard B, Comhair SA, Dibello P, Xu W, Shiva S, Aulak KS, Kinter M, Erzurum SC. Disulfide bond as a switch for copper-zinc superoxide dismutase activity in asthma. **Antioxid Redox Signal**. 2013 Feb 1;18(4):412-423.

Kim J, Kang Y, Kojima Y, Lighthouse JK, Hu X, Aldred MA, McLean DL, Park H, Comhair SA, Greif DM, Erzurum SC, Chun HJ. An endothelial apelin-FGF link mediated by miR-424 and miR-503 is disrupted in pulmonary arterial hypertension. **Nat Med**. 2013 Jan;19(1):74-82.

#### **Book Chapters:**

Asosingh K, Erzurum SC. Eosinophils and circulating endothelial progenitor cells. In: Lee JJ, Rosenberg HF, eds. Eosinophils in Health and Disease. Amsterdam ; Boston, MA: Elsevier/Academic Press; 2013. Chapter 6.5. p. 153-158.

#### **Farag, Hany**

##### **Journal Publications:**

Daoud E, El Fadl MA, Farag H, Kapoor A. Effects of airway pressure release ventilation on extra vascular lung water in acute lung injury and acute respiratory distress syndrome. **Crit Care Shock**. 2013;16(1):19-36.

#### **Farha, Samar**

##### **Journal Publications:**

Farha S, Lundgrin EL, Erzurum SC. Novel therapeutic approaches to preserve the right ventricle. **Curr Heart Fail Rep**. 2013 Mar;10(1):12-17.

Farha S, Laskowski D, George D, Park MM, Tang WHW, Dweik RA, Erzurum SC. Loss of alveolar membrane diffusing capacity and pulmonary capillary blood volume in pulmonary arterial hypertension. **Respir Res**. 2013;14:6.

#### **Fernandez, James**

##### **Journal Publications:**

Parsons MW, Li L, Wallace AM, Lee MJ, Katz HR, Fernandez JM, Saijo S, Iwakura Y, Austen KF, Kanaoka Y, Barrett NA. Dectin-2 regulates the effector phase of house dust mite-elicited pulmonary inflammation independently from its role in sensitization. **J Immunol**. 2014 Feb 15;192(4):1361-1371.

Gonzalez-Estrada A, Fernandez J. PCP: thinking beyond HIV. **BMJ Case Rep**. 2013;2013.

**Garcha, Puneet**

**Journal Publications:**

Narula T, Moghekar A, Arrossi V, Lane C, **Garcha P**, Akindipe O, Budev M, Mehta A. Cryptogenic organizing pneumonia in a lung transplant recipient with thoracic ultrasonographic correlation. *Chest*. 2014 Mar 1; 145(3 Suppl):623A.

**Book Chapters:**

**Garcha PS**. Diffuse Parenchymal Lung Disease; American Thoracic Society Pulmonary Board Review – 1<sup>st</sup> Edition – July 2014.

Baumgartner M, **Garcha PS**. Online case-based lesson on Obstructive Sleep Apnea. Apr 2013. <http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement>

**Garcha PS**, Aboussouan LS, Minai O. Sleep Disordered Breathing. Jan 2013

<http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/>

**Gildea, Tom**

**Journal Publications:**

Gildea TR, Mehra R. Changing landscape and disease-specific considerations of therapeutic bronchoscopy in clinical trials. ***J Bronchology Interv Pulmonol***. 2014 Jan;21(1):1-5.

Alraiyes AH, Machuzak MS, Gildea TR. Intussusception technique of intrabronchial silicone stents: description of technique and a case report. ***J Bronchology Interv Pulmonol***. 2013 Oct;20(4):342-344.

Choudhary C, Bandyopadhyay D, Salman R, Gildea T, Mehta A. Broncho-vascular fistulas from self-expanding metallic stents: A retrospective case review. ***Ann Thorac Med***. 2013 Apr;8(2):116-120.

Venkatappa N, Fadul R, Raymond D, Cicensia J, Gildea TR. Endobronchial valves for treatment of bronchopleural fistula in granulomatous polyangitis: a longitudinal case report. ***J Bronchology Interv Pulmonol***. 2013 Apr;20(2):186-188.

Hoffman SW, Gildea TR. Bronchoscope cleaning and reprocessing. ***AARC Times***. 2013 Mar;37(3):31-34.

Ha D, Choi H, Almeida FA, Arrossi A, Brainard J, Cicensia J, Farver C, Gildea T, Machuzak MS, Mazzone P. Histologic and molecular characterization of lung cancer with tissue obtained by electromagnetic navigation bronchoscopy. ***J Bronchology Interv Pulmonol***. 2013 Jan;20(1):10-15.

**Book Chapters:**

Gildea TR, Cicensia J. Electromagnetic navigation bronchoscopy. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 6. p. 107-120.

Khatri SB, Gildea TR. Bronchial thermoplasty for severe asthma. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 10. p. 189-200.

**Guzman, Jorge A.**



### ***Journal Publications:***

Nacheli GC, Sharma M, Wang X, Gupta A, Guzman JA, Tonelli AR. Novel device (AirWave) to assess endotracheal tube migration: A pilot study. **J Crit Care**. 2013 Aug;28(4):535-538.

Lam SW, Bauer SR, Guzman JA. Septic shock: The initial moments and beyond. **Cleve Clin J Med**. 2013 Mar;80(3):175-184.

### ***Book Chapters:***

Kapoor A, Guzman JA. Board simulation in critical care medicine. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. The Cleveland Clinic Foundation Intensive Review of Internal Medicine. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 38. p. 210-211.

### **Hatipoğlu, Umur**

#### ***Journal Publications:***

Hatipoglu U, Aboussouan LS. Chronic obstructive pulmonary disease: An update for the primary physician. **Cleve Clin J Med**. 2014 Jun;81(6):373-383.

Talanow R, Hatipoglu US, Graham R. Pulmonary hepatic nodules. **BMJ Case Rep**. 2013;2013.

Mireles-Cabodevila E, Hatipoglu U, Chatburn RL. A rational framework for selecting modes of ventilation. **Respir Care**. 2013 Feb;58(2):348-366

### **Heresi Davila, Gustavo**

#### ***Journal Publications:***

Navaneethan SD, Wehbe E, Heresi GA, Gaur V, Minai OA, Arrigain S, Nally JV, Jr., Schold JD, Rahman M, Dweik RA. Presence and outcomes of kidney disease in patients with pulmonary hypertension. **Clin J Am Soc Nephrol**. 2014 May;9(5):855-863.

Heresi GA, AYTEKIN M, Hammel JP, Wang S, Chatterjee S, Dweik RA. Plasma interleukin-6 adds prognostic information in pulmonary arterial hypertension. **Eur Respir J**. 2014 Mar;43(3):912-914.

Bolen MA, Renapurkar RD, Popovic ZB, Heresi GA, Flamm SD, Lau CT, Halliburton SS. High-pitch ECG-synchronized pulmonary CT angiography versus standard CT pulmonary angiography: A prospective randomized study. **AJR Am J Roentgenol**. 2013 Nov;201(5):971-976.

Tonelli AR, Arelli V, Minai OA, Newman J, Bair N, Heresi GA, Dweik RA. Causes and circumstances of death in pulmonary arterial hypertension. **Am J Respir Crit Care Med**. 2013 Aug 1;188(3):365-369.

Tonelli AR, Yadav R, Gupta A, Arrossi AV, Heresi GA, Dweik RA. Spleen size in idiopathic and heritable pulmonary arterial hypertension. **Respiration**. 2013;85(5):391-399.

Minai OA, Parambil J, Dweik RA, Davila GH, Peterson L, Rollins KD, Chen H. Impact of switching from epoprostenol to IV treprostinil on treatment satisfaction and quality of life in patients with pulmonary hypertension. **Respir Med**. 2013 Mar;107(3):458-465.



**Highland, Kristin**

**Journal Publications:**

Saketkoo LA, Mittoo S, Huscher D, Khanna D, Dellaripa PF, Distler O, Flaherty KR, Frankel S, Oddis CV, Denton CP, Fischer A, Kowal-Bielecka OM, LeSage D, Merkel PA, Phillips K, Pittrow D, Swigris J, Antoniou K, Baughman RP, Castellino FV, Christmann RB, Christopher-Stine L, Collard HR, Cottin V, Danoff S, Highland KB, Hummers L, Shah AA, Kim DS, Lynch DA, Miller FW, Proudman SM, Richeldi L, Ryu JH, Sandorfi N, Sarver C, Wells AU, Strand V, Matteson EL, Brown KK, Seibold JR. Connective tissue disease related interstitial lung diseases and idiopathic pulmonary fibrosis: provisional core sets of domains and instruments for use in clinical trials. **Thorax**. 2014

Kreider M, Highland K. Pulmonary involvement in Sjogren syndrome. **Semin Respir Crit Care Med**. 2014 Apr;35(2):255-264.

Bogatkevich GS, Nietert PJ, Silver RM, Highland KB. Rationale for anticoagulant therapy of pulmonary fibrosis. **Am J Respir Crit Care Med**. 2014 Feb 1;189(3):362-363.

Highland KB, Culver DA. Pulmonary manifestations of sarcoidosis. In: Dellaripa P, Fischer A, Flaherty K, eds *Pulmonary Manifestations of Rheumatic Disease* 2014; 95-121

Highland KB, Silver RM. Pulmonary manifestations in mixed connective tissue disease. In: Dellaripa P, Fischer A, Flaherty K, eds *Pulmonary Manifestations of Rheumatic Disease* 2014; 73-82

Avouac J, Huscher D, Furst DE, Opitz CF, Distler O, Allanore Y, for the EPOSS group. Expert consensus for performing right heart catheterization for suspected pulmonary arterial hypertension in systemic sclerosis: a Delphi consensus study with cluster analysis. *Ann Rheum Dis* 2014; 73:191-197

**Hite, R. Duncan**

**Journal Publications:**

Truitt JD, Bernard GR, Steingrub J, Matthay MA, Liu KD, Albertson TE, Brower RG, Shanholtz C, Rock P, Douglas IS, Deboisblanc BP, Hough CL, Hite RD, Thompson BT. Rosuvastatin for sepsis-associated acute respiratory distress syndrome. **N Engl J Med**. 2014 Jun 5;370(23):2191-2200.

**Hsieh, Fred**

**Journal Publications:**

Hsieh FH. Hypereosinophilic syndrome. **Ann Allergy Asthma Immunol**. 2014 Jun;112(6):484-488.

Bernstein JA, Lang DM, Khan DA, Craig T, Dreyfus D, Hsieh F, Sheikh J, Weldon D, Zuraw B, Bernstein DI, Blessing-Moore J, Cox L, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph CR, Schuller DE, Spector SL, Tilles SA, Wallace D. The diagnosis and management of acute and chronic urticaria: 2014 update. **J Allergy Clin Immunol**. 2014 May;133(5):1270-1277.

Visconte V, Tabarroki A, Rogers HJ, Hasrouni E, Traina F, Makishima H, Hamilton BK,

Liu Y, O'Keefe C, Lichtin A, Horwitz L, Sekeres MA, Hsieh FH, Tiu RV. SF3B1 mutations are infrequently found in non-myelodysplastic bone marrow failure syndromes and mast cell diseases but, if present, are associated with the ring sideroblast phenotype. **Haematologica**. 2013 Sep;98(9):e105-e107.

Hsieh FH. Additional insights into epithelial secreted phospholipase A2 group x in asthma. **Am J Respir Crit Care Med**. 2013 Jul 1;188(1):2-3.

Siles R, Xu M, Hsieh FH. The utility of serum tryptase as a marker in chronic spontaneous urticaria. **Acta Derm Venereol**. 2013 May 2;93(3):354-355.

#### **Kapoor, Aanchal**

##### **Journal Publications:**

Bajaj NS, Bandhyopadhyay D, Sasidhar M, Parashar A, Kapoor A. A common presentation with an uncommon diagnosis. **ICU Dir**. 2013 Sep;4(5):252-256.

Daoud E, El Fadl MA, Farag H, Kapoor A. Effects of airway pressure release ventilation on extra vascular lung water in acute lung injury and acute respiratory distress syndrome. **Crit Care Shock**. 2013;16(1):19-36.

##### **Book Chapters:**

Kapoor A, Guzman JA. Board simulation in critical care medicine. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. The Cleveland Clinic Foundation Intensive Review of Internal Medicine. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 38. p. 210-211.

#### **Kotloff, Robert**

##### **Journal Publications:**

Shah RJ, Kotloff RM. The Expert Clinician: Beware of gloved fingers. **Ann Am Thorac Soc** 10:56-58, 2013.

Kotloff RM. Risk stratification of lung transplant candidates: Implications for organ allocation. **Ann Intern Med** 158:699-700, 2013.

Shah RJ, Kotloff RM. Lung transplantation for obstructive lung diseases. **Semin Resp Crit Care Med** 34:288-296, 2013.

Courtright KR, Kotloff RM. The Expert Clinician: A surreptitious trip to the lungs. **Ann Am Thorac Soc**. 2014 Jan;11:137-140.

Cundiff WB, McCormack FX, Wikenheiser-Brokamp K, Starnes S, Kotloff R, Benzaquen S. Successful management of a chronic, refractory bronchopleural fistula with endobronchial valves followed by talc pleurodesis. **Am J Respir Crit Care Med**. 2014 Feb 15;189:490-491.

##### **Book Chapters:**

Kotloff RM, Keshavjee S. Lung transplantation. In: Murray, Nadel, Mason, Broaddus, Martin, King, Schraufnagel (editors), *Textbook of Respiratory Medicine*, 6<sup>th</sup> edition, New York, Elsevier; in press.

Afessa B, Peters SG, and Kotloff RM. Non-infectious pulmonary complications of

hematopoietic stem cell and solid organ transplantation. In: Grippi MA, Elias JA, Fishman JA, Kotloff RM, Pack AI, Senior RM (editors). *Fishman's Pulmonary Diseases and Disorders*, 5<sup>th</sup> edition. New York, McGraw Hill; in press.

Kotloff RM. Acute respiratory failure in the surgical patient. In: Grippi MA, Elias JA, Fishman JA, Kotloff RM, Pack AI, Senior RM (editors). *Fishman's Pulmonary Diseases and Disorders*, 5<sup>th</sup> edition. New York, McGraw Hill; in press.

#### **Books:**

Grippi MA, Elias JA, Fishman JA, Kotloff RM, Pack AI, Senior RM (editors). *Fishman's Pulmonary Diseases and Disorders*, 5th Edition, McGraw Hill, New York, in press.

#### **Khatri, Sumita**

##### **Journal Publications:**

Holguin F, Comhair SAA, Hazen SL, Powers RW, Khatri SS, Bleecker ER, Busse WW, Calhoun WJ, Castro M, Fitzpatrick AM, Gaston B, Israel E, Jarjour NN, Moore WC, Peters SP, Teague WG, Chung KF, Erzurum SC, Wenzel SE. An association between L-arginine/asymmetric dimethyl arginine balance, obesity, and the age of asthma onset phenotype. **Am J Respir Crit Care Med**. 2013 Jan 15;187(2):153-159.

##### **Book Chapters:**

Khatri SB, Gildea TR. Bronchial thermoplasty for severe asthma. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 10. p. 189-200.

#### **Lang, David**

##### **Journal Publications:**

Bernstein JA, Lang DM, Khan DA, Craig T, Dreyfus D, Hsieh F, Sheikh J, Weldon D, Zuraw B, Bernstein DI, Blessing-Moore J, Cox L, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph CR, Schuller DE, Spector SL, Tilles SA, Wallace D. The diagnosis and management of acute and chronic urticaria: 2014 update. **J Allergy Clin Immunol**. 2014 May;133(5):1270-1277.

Lang DM. A critical appraisal of omalizumab as a therapeutic option for chronic refractory urticaria/angioedema. **Ann Allergy Asthma Immunol**. 2014 Apr;112(4):276-279.

Gendelman SR, Lang DM. Specific immunotherapy in the treatment of atopic dermatitis: a systematic review using the GRADE system. **Ann Allergy Asthma Immunol**. 2013 Dec;111(6):555-561.

Portnoy J, Chew GL, Phipatanakul W, Williams PB, Grimes C, Kennedy K, Matsui EC, Miller JD, Bernstein D, Blessing-Moore J, Cox L, Khan D, Lang D, Nicklas R, Oppenheimer J, Randolph C, Schuller D, Spector S, Tilles SA, Wallace D, Seltzer J, Sublett J. Environmental assessment and exposure reduction of cockroaches: A practice parameter. **J Allergy Clin Immunol**. 2013 Oct;132(4):802-808.e25.

Lang DM, Hsieh FH, Bernstein JA. Contemporary approaches to the diagnosis and management of physical urticaria. **Ann Allergy Asthma Immunol**. 2013 Oct;111(4):235-241.

Lang DM. Multimorbidity: the new normal. **Ann Am Thorac Soc**. 2013 Oct;10(5):491-493.

**Machuzak, Michael**

**Journal Publications:**

Sethi S, Machuzak MS. A remedy for hoarseness in a patient with granulomatosis with polyangiitis. **J Bronchology Interv Pulmonol**. 2013 Jul;20(3):286-288.

Alraiyes AH, Machuzak MS, Gildea TR. Intussusception technique of intrabronchial silicone stents: description of technique and a case report. **J Bronchology Interv Pulmonol**. 2013 Oct;20(4):342-344.

Narula T, Machuzak MS, Mehta AC. Newer modalities in the work-up of peripheral pulmonary nodules. **Clin Chest Med**. 2013 Sep;34(3):395-415.

Ha D, Choi H, Almeida FA, Arrossi A, Brainard J, Cicienia J, Farver C, Gildea T, Machuzak MS, Mazzone P. Histologic and molecular characterization of lung cancer with tissue obtained by electromagnetic navigation bronchoscopy. **J Bronchology Interv Pulmonol**. 2013 Jan;20(1):10-15.

**Book Chapters:**

Machuzak MS. Management of posttransplant disorders. In: Ernst A, Herth FJF, eds. *Principles and Practice of Interventional Pulmonology*. New York, NY: Springer; 2013. Chapter 45. p. 463-476.

**Mazzone, M.D., Peter**

**Journal Publications:**

Mazzone PJ, Obuchowski N, Fu AZ, Phillips M, Mezziane M. Quality of life and healthcare use in a randomized controlled lung cancer screening study. **Ann Am Thorac Soc**. 2013 Aug;10(4):324-329

Mehta AC, Mazzone PJ. An attempt to reach the galaxy of the pulmonary nodules. **Am J Respir Crit Care Med**. 2013 Aug 1;188(3):264-265.

Detterbeck FC, Mazzone PJ, Naidich DP, Bach PB. Screening for lung cancer: Diagnosis and management of lung cancer, 3rd ed: American college of chest physicians evidence-based clinical practice guidelines. **Chest**. 2013 May;143(5 Suppl):e78S-e92S.

Gould MK, Donington J, Lynch WR, Mazzone PJ, Midthun DE, Naidich DP, Wiener RS. Evaluation of individuals with pulmonary nodules: When is it lung cancer? Diagnosis and management of lung cancer, 3rd ed: American college of chest physicians evidence-based clinical practice guidelines. **Chest**. 2013 May;143(5 Suppl):e93S-e120S.

Mazzone PJ, Obuchowski N, Phillips M, Risius B, Bazerbashi B, Mezziane M. Lung cancer screening with computer aided detection chest radiography: design and results of a randomized, controlled trial. **PLoS One**. 2013;8(3):e59650.

Limburg PJ, Mandrekar SJ, Aubry MC, Ziegler KLA, Zhang J, Yi JE, Henry M, Tazelaar HD, Lam S, McWilliams A, Midthun DE, Edell ES, Rickman OB, Mazzone P, Tockman

M, Beamis JF, Lamb C, Simoff M, Loprinzi C, Szabo E, Jett J. Randomized phase II trial of sulindac for lung cancer chemoprevention. **Lung Cancer**. 2013 Mar;79(3):254-261.

Ha D, Choi H, Almeida FA, Arrossi A, Brainard J, Cicens J, Farver C, Gildea T, Machuzak MS, Mazzone P. Histologic and molecular characterization of lung cancer with tissue obtained by electromagnetic navigation bronchoscopy. **J Bronchology Interv Pulmonol**. 2013 Jan;20(1):10-15.

#### **Book Chapters:**

Mazzone PJ, Sahoo D, Horvath EP, Jr. Occupational medicine. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. The Cleveland Clinic Foundation Intensive Review of Internal Medicine. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 9. p. 20-21.

Choi H, Mazzone P, Mehta AC. Lung cancer. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. The Cleveland Clinic Foundation Intensive Review of Internal Medicine. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 34. p. 200-201.

Mazzone P, Petersen H. Lung cancer. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. Egan's Fundamentals of Respiratory Care. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 28. p. 623-640.

Petersen H, Mazzone P. Preoperative pulmonary evaluation. In: Spiro SG, Silvestri GA, Agusti A, eds. Clinical Respiratory Medicine. 4th ed. Philadelphia, PA: Elsevier Saunders; 2012. Chapter 73. p. 869-875.

#### **Mehra, Reena**

##### **Journal Publications:**

Walia H, Li H, Rueschman M, Bhatt DL, Quan SF, Patel SR, Gottlieb DJ, Punjabi NM, Redline S, Mehra R. Severe Obstructive Sleep Apnea is Associated with Poorly Controlled Blood Pressure Despite Anti-Hypertensive Medications: Heart Biomarker Evaluation in Apnea Treatment (HeartBEAT) Study, **J Clinical Sleep Medicine**, in press

May A, Mehra R. Obstructive Sleep Apnea: Role of Intermittent Hypoxia and Inflammation. **Semin Respir Crit Care Med** (in press)

Kunyose, K, Mehra R. Targeting Sleep Disordered Breathing to Prevent Heart Failure: What is the Evidence? **Current Cardiovascular Risk Reports** (in press)

Mehra R. Sleep Apnea ABCs: Airway, Breathing and Circulation, **Cleveland Clinic Journal of Medicine**. Aug;81(8):479-89.

Mehra R. Understanding Nocturnal Asthma: the Plot Thickens. **Am J Respir Crit Care Med** 2014 Aug 1;190(3):243-4.

Gottlieb DJ, Punjabi NM, Mehra R, Patel SR, Quan SF, Babineau DC, Tracy RP, Rueschman M, Blumenthal RS, Lewis EF, Bhatt DL, Redline S. CPAP versus oxygen in obstructive sleep apnea. **N Engl J Med**. 2014 Jun 12;370(24):2276-2285.

Mehra R. Obstructive sleep apnea research: challenges and new horizons. **Sleep Med**.

2014 May;15(5):483-484.

Gharib SA, Seiger AN, Hayes AL, Mehra R, Patel SR. Treatment of obstructive sleep apnea alters cancer-associated transcriptional signatures in circulating leukocytes. ***Sleep***. 2014 Apr 1;37(4):709-14, 714A-714T.

Akatsu H, Ewing SK, Stefanick ML, Fink HA, Stone KL, Barrett-Connor E, Mehra R, Ancoli-Israel S, Redline S, Hoffman AR, For The Osteoporotic Fractures In Men MrOS Research Group. Association Between Thyroid Function and Objective and Subjective Sleep Quality in Older Men: The Osteoporotic Fractures in Men (MrOS) Study. ***Endocr Pract***. 2014 Jun 1;20(6):576-86.

Koo BB, Mehra R, Blackwell T, Ancoli-Israel S, Stone KL, Redline S; Osteoporotic Fractures in Men (MrOS) Study Group. [Periodic limb movements during sleep and cardiac arrhythmia in older men \(MrOS sleep\)](#). *J Clin Sleep Med*. 2014 Jan 15;10(1):7-11.

Gildea TR, Mehra R. Changing landscape and disease-specific considerations of therapeutic bronchoscopy in clinical trials. ***J Bronchology Interv Pulmonol***. 2014 Jan;21(1):1-5.

Mehra R, Redline S. Arrhythmia risk associated with sleep disordered breathing in chronic heart failure. ***Curr Heart Fail Rep***. 2014 Mar;11(1):88-97.

Sabater-Lleal M, Huang J, Chasman D, Naitza S, Dehghan A, Johnson AD, Teumer A, Reiner AP, Folkersen L, Basu S, Rudnicka AR, Trompet S, Mälarstig A, Baumert J, Bis JC, Guo X, Hottenga JJ, Shin SY, Lopez LM, Lahti J, Tanaka T, Yanek LR, Oudot-Mellakh T, Wilson JF, Navarro P, Huffman JE, Zemunik T, Redline S, Mehra R, et al; VTE Consortium; STROKE Consortium; Wellcome Trust Case Control Consortium 2 (WTCCC2); C4D Consortium; CARDIoGRAM Consortium, Wallaschofski H, Smith NL, Tregouet D, Ridker PM, Tang W, Strachan DP, Hamsten A, O'Donnell CJ. Multiethnic meta-analysis of genome-wide association studies in >100 000 subjects identifies 23 fibrinogen-associated Loci but no strong evidence of a causal association between circulating fibrinogen and cardiovascular disease. ***Circulation***. 2013 Sep 17;128(12):1310-24.

Mehra R. Individual clinical symptoms have limited utility in the diagnosis of obstructive sleep apnoea. ***Evid Based Med***. 2014 Apr;19(2):e10.

Seif F, Patel SR, Walia HK, Rueschman M, Bhatt DL, Blumenthal RS, Quan SF, Gottlieb DJ, Lewis EF, Patil SP, Punjabi NM, Babineau DC, Redline S, Mehra R. Obstructive sleep apnea and diurnal nondipping hemodynamic indices in patients at increased cardiovascular risk. ***J Hypertens***. 2014 Feb;32(2):267-275.

Mehra R, Benjamin EJ. Radiofrequency ablation as initial therapy in paroxysmal atrial fibrillation. ***N Engl J Med***. 2013 Jan 31;368(5):476-7.

Seif F, Patel SR, Walia H, Rueschman M, Bhatt DL, Gottlieb DJ, Lewis EF, Patil SP, Punjabi NM, Babineau DC, Redline S, Mehra R. Association between obstructive sleep apnea severity and endothelial dysfunction in an increased background of cardiovascular burden. ***J Sleep Res***. 2013 Aug;22(4):443-51.



Walia HK, Mehra R. Obstructive sleep apnea therapy and metabolic outcomes. **Sleep Med Clin**. 2013 Dec;8(4):433-452.

**Book Chapter:**

Walia HK, Mehra R. Evaluation and Monitoring of Respiratory Function. Editor: Chokroverty

**Mehta, Atul**

**Journal Publications:**

Snell GI, Westall GP, Levvey BJ, Jaksch P, Keshavjee S, Hoopes CW, Ahya V, Mehta A, Trulock EP, III. A randomized, double-blind, placebo-controlled, multicenter study of rabbit ATG in the prophylaxis of acute rejection in lung transplantation. **Am J Transplant**. 2014 May;14(5):1191-1198.

Malik S, Shah PS, Mehta AC. Bronchial venous plexus in left ventricular dysfunction. **J Bronchology Interv Pulmonol**. 2014 Apr;21(2):142-144.

Khemasuwan D, Farver CF, Mehta AC. Parasites of the air passages. **Chest**. 2014 Apr 1;145(4):883-895.

Rivera MP, Mehta AC, Wahidi MM. Establishing the diagnosis of lung cancer: Diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. **Chest**. 2013 May;143(5 Suppl):e142S-e165S.

Mehta AC, Cicens J. ROSEs are read. **Chest**. 2014 Jan 1;145(1):7-9.

Mehta AC, Khemasuwan D. A foreign body of a different kind: Pill aspiration. **Ann Thorac Med**. 2014 Jan-Mar;9(1):1-2.

Tunsupon P, Panchabhai TS, Khemasuwan D, Mehta AC. Black bronchoscopy. **Chest**. 2013 Nov;144(5):1696-1706.

Narula T, Baughman RP, Mehta AC. "Sarcoidosis Americana-route Europa". **J Bronchology Interv Pulmonol**. 2013 Oct;20(4):293-296.

Narula T, Machuzak MS, Mehta AC. Newer modalities in the work-up of peripheral pulmonary nodules. **Clin Chest Med**. 2013 Sep;34(3):395-415.

Kupeli E, Khemasuwan D, Lee P, Mehta AC. "Pills" and the air passages. **Chest**. 2013 Aug;144(2):651-660.

Mehta AC, Mazzone PJ. An attempt to reach the galaxy of the pulmonary nodules. **Am J Respir Crit Care Med**. 2013 Aug 1;188(3):264-265.

Choudhary C, Bandyopadhyay D, Salman R, Gildea T, Mehta A. Broncho-vascular fistulas from self-expanding metallic stents: A retrospective case review. **Ann Thorac Med**. 2013 Apr;8(2):116-120.

Khoo KL, Lee P, Mehta AC. Endobronchial epinephrine: Confusion is in the air. **Am J Respir Crit Care Med**. 2013 May 15;187(10):1137-1138.

Ashton RW, Mehta AC, Prakash UBS. One journal's odyssey to indexing: How JOBIP made it into MEDLINE. **J Bronchology Interv Pulmonol**. 2013 Apr;20(2):101-102.

Mehta AC. ....one small step! **J Bronchology Interv Pulmonol**. 2013 Jan;20(1):1-2.

#### **Books, Entire:**

Mehta AC, Jain P. *Interventional Bronchoscopy : A Clinical Guide*. New York, NY: Humana; 2013. 262 pgs.

#### **Book Chapters:**

Ramaswamy A, Dweik RA, Mehta AC. Pleural diseases. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. *The Cleveland Clinic Foundation Intensive Review of Internal Medicine*. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 37. p. 207-209.

Choi H, Mazzone P, Mehta AC. Lung cancer. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. *The Cleveland Clinic Foundation Intensive Review of Internal Medicine*. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 34. p. 200-201.

Wang KP, Mehta AC, Turner JF, Jr. Preface to the Third Edition. In: Wang KP, Mehta AC, Turner JF, Jr., eds. *Flexible Bronchoscopy*. 3rd ed. Chichester, West Sussex, UK: Wiley-Blackwell; 2012. p. ix

Hadique S, Jain P, Mehta AC. Therapeutic bronchoscopy for central airway obstruction. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 8. p. 143-176.

Jain P, Haponik EF, Loschner AL, Mehta AC. Transbronchial needle aspiration. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 3. p. 45-69.

Jain P, Hadique S, Mehta AC. Transbronchial lung biopsy. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 2. p. 15-44.

Lee P, Mehta AC. Airway stents. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy: a Clinical Guide*. New York, NY: Humana; 2013. Chapter 9. p. 177-187.

Abu El-Sameed Y, Kupeli E, Mehta AC. Electromagnetic navigation. In: Diaz-Jimenez JP, Rodriguez AN, eds. *Interventions in Pulmonary Medicine*. New York, NY: Springer; 2013. Chapter 16. p. 237-250.

#### **Mireles-Cabodevila Eduardo**

##### **Journal Publications:**

Badireddi S, Bercher AJ, Holder JB, Mireles-Cabodevila E. Vitamin D deficiency in patients with neuromuscular diseases with chronic respiratory failure. **JPEN J Parenter Enteral Nutr**. 2013 Jun 10;38(5):602-607.



Adams JR, Hoffman J, Lavelle J, Mireles-Cabodevila E. Pilot balloon malfunction caused by endotracheal tube bite blocker. **Respir Care**. 2014 Feb;59(2):e22-e24.

Aboussouan LS, Mireles-Cabodevila E. Respiratory support in patients with myotrophic lateral sclerosis. **Respir Care**. 2013 Sep;58(9):1555-1558.

Mireles-Cabodevila E, Hatipoglu U, Chatburn RL. A rational framework for selecting modes of ventilation. **Respir Care**. 2013 Feb;58(2):348-366

#### **Book Chapters:**

Chatburn RL, Mireles-Cabodevila E. Basic principles of ventilator design. In: Tobin MJ, ed. Principles and Practice of Mechanical Ventilation. 3rd ed. New York, NY: McGraw-Hill Medical; 2013. Chapter 3. p. 65-97.

#### **Moghekar, Ajit**

##### **Journal Publications:**

Narula T, Raman D, Wiesen J, Choudhary C, Reddy AJ, Moghekar A. A patient with acute COPD exacerbation and shock. **Chest**. 2013 Dec 1;144(6):e1-e3.

Wiesen J, Raman D, Adams J, Choudhary C, Moghekar A. A patient with lung cancer presenting with respiratory failure and shock. **Chest**. 2013 Jul 1;144(1):e1-e4.

#### **Newton, Lisanne**

##### **Journal Publications:**

Newton LP, Osei-Akosa Y, Strunk RC, Krauss M, Bacharier LB, Garbutt JM, Rivera-Spoljaric K. Nonrespiratory symptoms before loss of asthma control in children. **J Allergy Clin Immunol Pract**. 2013 May;1(3):304-306.

#### **Olman, Mitchell**

##### **Journal Publications:**

Grove LM, Southern BD, Jin TH, White KE, Paruchuri S, Harel E, Wei Y, Rahaman SO, Gladson CL, Ding Q, Craik CS, Chapman HA, Olman MA. Urokinase-type plasminogen activator receptor (upar) ligation induces a raft-localized integrin signaling switch that mediates the hypermotile phenotype of fibrotic fibroblasts. **J Biol Chem**. 2014 May 2;289(18):12791-12804.

Noth I, Olman MA. Reply [Rationale for anticoagulant therapy of pulmonary fibrosis]. **Am J Respir Crit Care Med**. 2014 Feb 1;189(3):363.

Chiang DJ, Roychowdhury S, Bush K, McMullen MR, Pisano S, Niese K, Olman MA, Pritchard MT, Nagy LE. Adenosine 2A receptor antagonist prevented and reversed liver fibrosis in a mouse model of ethanol-exacerbated liver fibrosis. **PLoS One**. 2013;8(7):e69114.

Noth I, Olman M. Reply [A placebo-controlled randomized trial of warfarin in idiopathic pulmonary fibrosis.: A hidden subgroup?]. **Am J Respir Crit Care Med**. 2013 May 1;187(9):1030.

Noth I, Olman M. Reply [Warfarin in idiopathic pulmonary fibrosis: friend or foe, is it a matter of genes and heparin?]. **Am J Respir Crit Care Med**. 2013 Jan 15;187(2):214.

**Olbrych, Thomas**

**Journal Publications:**

Tedja R, El-Sherief A, Olbrych T, Gordon S. Multifocal periostitis as a complication of chronic use of voriconazole in a lung transplant recipient. ***Transpl Infect Dis***. 2013 Aug;15(4):424-429.

**Parambil, Joseph**

**Journal Publications:**

Mira-Avendano IC, Parambil JG, Yadav R, Arrossi V, Xu M, Chapman JT, Culver DA. A retrospective review of clinical features and treatment outcomes in steroid-resistant interstitial lung disease from polymyositis/dermatomyositis. ***Respir Med***. 2013 Jun;107(6):890-896.

Minai OA, Parambil J, Dweik RA, Davila GH, Peterson L, Rollins KD, Chen H. Impact of switching from epoprostenol to IV treprostinil on treatment satisfaction and quality of life in patients with pulmonary hypertension. ***Respir Med***. 2013 Mar;107(3):458-465.

**Book Chapter:**

Parambil JG. Interstitial lung disease. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. The Cleveland Clinic Foundation Intensive Review of Internal Medicine. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 36. p. 205-206.

**Pichurko, Bohdan**

**Journal Publications:**

Tonelli AR, Alkukhun L, Arelli V, Ramos J, Newman J, McCarthy K, Pichurko B, Minai OA, Dweik RA. Value of impedance cardiography during 6-minute walk test in pulmonary hypertension. ***Clin Transl Sci***. 2013 Dec;6(6):474-480.

**Reddy, Anita**

**Journal Publications:**

Narula T, Raman D, Wiesen J, Choudhary C, Reddy AJ, Moghekar A. A patient with acute COPD exacerbation and shock. ***Chest***. 2013 Dec 1;144(6):e1-e3.

**Sahoo, Debasis**

**Journal Publications:**

Mazzone PJ, Sahoo D, Horvath EP, Jr. Occupational medicine. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. The Cleveland Clinic Foundation Intensive Review of Internal Medicine. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 9. p. 20-21.

**Sasidhar, Madhu**

**Journal Publications:**

Stoller JK, Roberts V, Matt D, Chom L, Sasidhar M, Chatburn RL. Radio-frequency tracking of respiratory equipment: rationale and early experience at the Cleveland Clinic. ***Respir Care***. 2013 Dec;58(12):2069-2075.

Bajaj NS, Bandhyopadhyay D, Sasidhar M, Parashar A, Kapoor A. A common presentation with an uncommon diagnosis. ***ICU Dir***. 2013 Sep;4(5):252-256.

**Scheraga, Rachel**

***Journal Publications:***

Scheraga RG, Thannickal VJ. Wnt/ $\beta$ -Catenin and Transforming Growth Factor- $\beta$  Signaling in Pulmonary Fibrosis. A Case for Antagonistic Pleiotropy? *Am J Respir Crit Care Med*. 2014 Jul 15;190(2):129-31.

Bridges TM, Scheraga RG, Tulapurkar ME, Suffredini D, Liggett SB, Ramarathnam A, Potla R, Singh IS, Hasday JD. Polymorphisms in human heat shock factor-1 and analysis of potential biological consequences. *Cell Stress Chaperones*. 2014 Jul 16.

**Sethi, Sonali**

***Journal Publications:***

Sethi S, Machuzak MS. A remedy for hoarseness in a patient with granulomatosis with polyangiitis. *J Bronchology Interv Pulmonol*. 2013 Jul;20(3):286-288.

***Book Chapter:***

Sethi S, Cicienia J. EBUS-TBNA bronchoscopy. In: Mehta AC, Jain P, eds. *Interventional Bronchoscopy : a Clinical Guide*. New York, NY: Humana; 2013. Chapter 5. p. 85-106.

**Southern, Brian**

***Journal Publications:***

Grove LM, Southern BD, Jin TH, White KE, Paruchuri S, Harel E, Wei Y, Rahaman SO, Gladson CL, Ding Q, Craik CS, Chapman HA, Olman MA. Urokinase-type plasminogen activator receptor (upar) ligation induces a raft-localized integrin signaling switch that mediates the hypermotile phenotype of fibrotic fibroblasts. *J Biol Chem*. 2014 May 2;289(18):12791-12804.

Ding Q, Cai GQ, Hu M, Yang Y, Zheng A, Tang Q, Gladson CL, Hayasaka H, Wu H, You Z, Southern BD, Grove LM, Rahaman SO, Fang H, Olman MA. FAK-related nonkinase is a multifunctional negative regulator of pulmonary fibrosis. *Am J Pathol*. 2013 May;182(5):1572-1584.

**Stoller, James**

***Journal Publications:***

Tan L, Dickens JA, Demeo DL, Miranda E, Perez J, Rashid ST, Day J, Ordonez A, Marciniak SJ, Haq I, Barker AF, Campbell EJ, Eden E, McElvaney NG, Rennard SI, Sandhaus RA, Stocks JM, Stoller JK, Strange C, Turino G, Rouhani FN, Brantly M, Lomas DA. Circulating polymers in alpha1-antitrypsin deficiency. *Eur Respir J*. 2014 May;43(5):1501-1504.

Stoller JK, Strange C, Schwarz L, Kallstrom TJ, Chatburn RL. Detection of alpha-1 antitrypsin deficiency by respiratory therapists: Experience with an educational program. *Respir Care*. 2014 May;59(5):667-672.

Minai OA, Fessler H, Stoller JK, Criner GJ, Scharf SM, Meli Y, Nutter B, DeCamp MM. Clinical characteristics and prediction of pulmonary hypertension in severe emphysema. *Respir Med*. 2014 Mar;108(3):482-490.

Hopkins MM, O'Neil DA, FitzSimons K, Bailin PL, Stoller JK. Leadership and organization development in health-care: lessons from the Cleveland Clinic. *Adv Health Care Manag*. 2011;10:151-165.

Stoller JK, Roberts V, Matt D, Chom L, Sasidhar M, Chatburn RL. Radio-frequency tracking of respiratory equipment: rationale and early experience at the Cleveland Clinic. **Respir Care**. 2013 Dec;58(12):2069-2075.

Stoller JK, Barker C, FitzSimons K. Physician-leader on-boarding: The Cleveland Clinic experience. **Journal of Management Development**. 2013;32(9):960-970.

Greenwald LR, Stoller JK. Communicating with graduate medical trainees: the Cleveland Clinic experience. **Perspect Med Educ**. 2013 Jun;2(3):142-155.

Mehta NB, Hull AL, Young JB, Stoller JK. Just imagine: New paradigms for medical education. **Acad Med**. 2013 Oct;88(10):1418-1423.

Modrykamien AM, Stoller JK. The scientific basis for protocol-directed respiratory care. **Respir Care**. 2013 Oct;58(10):1662-1668.

Stoller JK. Electronic siloing: An unintended consequence of the electronic health record. **Cleve Clin J Med**. 2013 Jul;80(7):406-409.

Stoller JK. Elastin degradation products as biomarkers in alpha-1 antitrypsin deficiency: lastin' impact? **COPD**. 2013 Aug;10(4):403-404.

Kester L, Stoller JK. A computer-aided audit system for respiratory therapy consult evaluations: description of a method and early results. **Respir Care**. 2013 May;58(5):790-797.

Sandhaus RA, Stoller JK. Introduction to the 50th anniversary of the description of alpha-1 antitrypsin deficiency. **COPD**. 2013 Mar;10 Suppl 1:1-2.

Stoller JK, Brantly M. The challenge of detecting alpha-1 antitrypsin deficiency. **COPD**. 2013 Mar;10 Suppl 1:26-34.

Stoller JK, Taylor CA, Farver CF. Emotional intelligence competencies provide a developmental curriculum for medical training. **Med Teach**. 2013;35(3):243-247.

Stoller JK. Commentary: Recommendations and remaining questions for health care leadership training programs. **Acad Med**. 2013 Jan;88(1):12-15.

#### **Book Chapters:**

Stoller JK. Pulmonary function tests for the boards. In: Stoller JK, Nielsen C, Buccola J, Brateanu A, eds. *The Cleveland Clinic Foundation Intensive Review of Internal Medicine*. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. Chapter 39. p. 212.

Stoller JK. Alpha-1 antitrypsin deficiency. In: Murray MF, Babyatsky MW, Giovanni MA, eds. *Clinical Genomics : Practical Applications in Adult Patient Care*. New York, NY: McGraw-Hill; 2014. Chapter 115. p. 567-570.

Specht NL, Stoller JK. Review of thoracic imaging. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. *Egan's Fundamentals of Respiratory Care*. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 20. p. 451-475.

Diaz-Guzman E, Dweik RA, Stoller JK. Obstructive lung disease: Chronic obstructive pulmonary disease (COPD), asthma, and related diseases. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. *Egan's Fundamentals of Respiratory Care*. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 23. p. 525-548.

Kester L, Stoller JK. Quality and evidence-based respiratory care. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. *Egan's Fundamentals of Respiratory Care*. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 2. p. 20-40.

***Whole Book:***

Stoller JK, Nielsen C, Buccola J, Brateanu A. *The Cleveland Clinic Foundation Intensive Review of Internal Medicine*. 6th ed. Philadelphia, PA: Wolters Kluwer Health; 2014. 409 pgs.

Kacmarek RM, Stoller JK, Heuer AJ. *Egan's Fundamentals of Respiratory Care*. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. 1401 pgs.

**Suri, Anu**

***Journal Publications:***

Barjaktarevic IZ, Qadir N, Suri A, Santamauro JT, Stover D. Organizing pneumonia as a side effect of ipilimumab treatment of melanoma. ***Chest***. 2013 Mar;143(3):858-861.

**Talliercio, Rachel**

***Journal Publications:***

Talliercio RM, Ashton RW, Horwitz L, Swanson KC, Wendt PC, Hoyer JD, Oliveira JL. Hb Grove City [ $\beta$ 38(C4)Thr $\rightarrow$ Ser, ACC $\rightarrow$ AGC; HBB: c.116C $\rightarrow$ G]: A new low oxygen affinity  $\beta$  chain variant. ***Hemoglobin***. 2013;37(4):396-403.

**Tolle, Leslie**

***Journal Publications:***

Tolle LB, Standiford TJ. Danger-associated molecular patterns (DAMPs) in acute lung injury. ***J Pathol***. 2013 Jan;229(2):145-156.

**Tonelli, Adriano**

***Journal Publications:***

Bauer SR, Tonelli AR. Beyond the evidence: treating pulmonary hypertension in the ICU. ***Critical Care***. [Epub ahead of print]

Tonelli AR, Mkinai OA. Saudi Guidelines on the Diagnosis and Treatment of Pulmonary Hypertension: Perioperative management in patients with pulmonary hypertension. ***Annals of Thoracic Medicine***. 2014; 9 (5): 98-107.

Alkukhun L, Baumgartner M, Budev M, Dweik RA, Tonelli AR. Electrocardiographic Differences between COPD Patients Evaluated for Lung Transplantation With and without Pulmonary Hypertension. ***COPD***. 2014 Jul 1. [Epub ahead of print]

Aytekin M, Tonelli AR, Farver CF, Feldstein AE, Dweik RA. Leptin deficiency recapitulates the histological features of pulmonary arterial hypertension in mice. ***Int J Clin Exp Pathol***. 2014 Apr 15;7(5):1935-46.

Tonelli AR, Wang XF, Alkukhun L, Zhang Q, Dweik RA, Minai OA. Heart rate slopes during 6-min walk test in pulmonary arterial hypertension, other lung diseases, and healthy controls. **Physiol Rep**. 2014 Jun 11;2(6). pii: e12038. doi: 10.14814/phy2.12038. Print 2014 Jun 1.

Tonelli AR, Conci D, Tamarappoo BK, Newman J, Dweik RA. Prognostic Value of Echocardiographic Changes in Patients with Pulmonary Arterial Hypertension Receiving Parenteral Prostacyclin Therapy. **J Am Soc Echocardiogr**. 2014 Jul;27(7):733-741.

Cheng JW, Tonelli AR, Pettersson G, Krasuski RA. Pharmacologic management of perioperative pulmonary hypertension. **J Cardiovasc Pharmacol**. 2014 Apr;63(4):375-84.

Tonelli AR, Zein J, Adams J, Ioannidis JP. Effects of interventions on survival in acute respiratory distress syndrome: an umbrella review of 159 published randomized trials and 29 meta-analyses. **Intensive Care Med**. 2014 Jun;40(6):769-87.

Dababneh L, Cikach F, Alkukhun L, Dweik RA, Tonelli AR. Sublingual microcirculation in pulmonary arterial hypertension. **Ann Am Thorac Soc**. 2014 May;11(4):504-12

Tonelli AR, Dweik RA. Macitentan and pulmonary arterial hypertension. **N Engl J Med**. 2014 Jan 2;370(1):81-2.

Heresi GA, Minai OA, Tonelli AR, Hammel JP, Farha S, Parambil JG and Dweik RA. Clinical characterization and survival of patients with borderline elevation in pulmonary artery pressure. **Pulm Circ**. 2013 Dec;3(4):916-25.

Sahay S, Tonelli AR. Pericardial effusion in pulmonary arterial hypertension. **Pulmonary Circulation** 2013;3; 467-477.

Tonelli AR, Baumgartner M, Alkukhun L, Minai OA, Dweik RA. Electrocardiography at Diagnosis and Close to the Time of Death in Pulmonary Arterial Hypertension. **Ann Noninvasive Electrocardiol**. 2014 May;19(3):258-65.

Tonelli AR, Alkukhun L, Arelli V, Ramos J, Newman J, McCarthy K, Pichurko B, Minai OA, Dweik RA. Value of Impedance Cardiography during 6-Minute Walk Test in Pulmonary Hypertension. **Clin Transl Sci**. 2013 Dec;6(6):474-80.

Tonelli AR, Dweik RA. Why patients who die of worsening pulmonary arterial hypertension are not on parenteral prostacyclin analog treatment? **J Heart Lung Transplant**. 2014 Feb;33(2):221.

Tonelli AR, Zein J, Ioannidis JP. Geometry of the randomized evidence for treatments of pulmonary hypertension. **Cardiovasc Ther**. 2013 Dec;31(6):e138-46.

Cikach FS Jr, Tonelli AR, Barnes J, Paschke K, Newman J, Grove D, Dababneh L, Wang S, Dweik RA. Breath Analysis in Pulmonary Arterial Hypertension. **Chest**. 2014 Mar 1;145(3):551-8.

Alkukhun L, Bair N, Dweik RA, Tonelli AR. Subcutaneous to Intravenous Prostacyclin

Analogue Transition in Pulmonary Hypertension. **J Cardiovasc Pharmacol**. 2014 Jan;63(1):4-8.

Tonelli AR. Pulmonary hypertension survival effects and treatment options in cystic fibrosis. **Curr Opin Pulm Med**. 2013 Nov;19(6):652-61.

Khabbaza JE, Krasuski RA, Tonelli AR. Intrapulmonary shunt confirmed by intracardiac echocardiography in the diagnosis of hepatopulmonary syndrome. **Hepatology**. 2013 Oct;58(4):1514-1515.

Tonelli AR, Arelli V, Minai OA, Newman J, Bair N, Heresi GA, Dweik RA. Causes and Circumstances of Death in Pulmonary Arterial Hypertension. **Am J Respir Crit Care Med**. 2013 Aug 1;188(3):365-9.

Cumbo-Nacheli G., Tonelli A., Dweik R. A. Effect of pneumonectomy on pulmonary artery pressure and right ventricular function. **Chirurgia** 2013 April;26(2):73-8

Tonelli AR, Haserodt S, Aytakin M, Dweik RA. Nitric oxide deficiency in pulmonary hypertension. **Pulm Circ**. 2013 Jan;3(1):20-30.

Wiesen J, Ornstein M, Tonelli AR, Menon V, Ashton RW. State of the evidence: mechanical ventilation with PEEP in patients with cardiogenic shock. **Heart**. 2013;99(24):1812-7

Tonelli AR, Dweik RA. Response (Left atrial size paradox). **Chest** 2013; 143(1):273.  
Louis L, Bair N, Banjac S, Dweik RA, Tonelli AR. Subdural hematomas in pulmonary arterial hypertension patients treated with prostacyclin analogs. **Pulmonary Circulation** 2012;2(4): 518-522.

Sahay S, Tonelli AR. Ventricular fibrillation cardiac arrest from the extrinsic compression of the left main coronary artery. **Heart** 2013 Jun;99(12):895-6.

Cumbo Nacheli G, Sharma M, Wang X, Gupta A, Guzman J, Tonelli AR. Novel device (AirWave) to assess endotracheal tube migration: a pilot study. **J Crit Care** 2013 Aug;28(4):535.e1-8.

Tonelli AR, Yadav R, Gupta A, Arrossi AV, Heresi GA, Dweik RA. Spleen Size in Idiopathic and Heritable Pulmonary Arterial Hypertension. **Respiration**. 2013;85(5):391-9.

#### **Book Chapters:**

Tonelli AR, Arroliga AC, Dweik RA. Pulmonary vascular disease. In: Kacmarek RM, Stoller JK, Heuer AJ, eds. Egan's Fundamentals of Respiratory Care. 10th ed. St. Louis, MO: Mosby Elsevier; 2013. Chapter 26. p. 580-598

#### **Tsuang, Wayne**

##### **Journal Publications:**

Tsuang WM, Vock DM, Finlen Copeland CA, Lederer DJ, Palmer SM. An acute change in lung allocation score and survival after lung transplantation: a cohort study. **Ann Intern Med**. 2013 May 7;158(9):650-657.



Vock DM, Tsiatis AA, Davidian M, Laber EB, Tsuang WM, Finlen Copeland CA, Palmer SM. Assessing the causal effect of organ transplantation on the distribution of residual lifetime. **Biometrics**. 2013 Dec;69(4):820-829.

Zafar MA, Tsuang W, Lach L, Eschenbacher W, Panos RJ. Dynamic hyperinflation correlates with exertional oxygen desaturation in patients with chronic obstructive pulmonary disease. **Lung**. 2013 Apr;191(2):177-182.

Yen H, Huang YC, Hurwitz LM, Miller MJ, Tsuang WM. A pulmonary arteriovenous malformation growing for 35 years comes to an end. **Am J Respir Crit Care Med**. 2014 Feb 1;189(3):356-357.

**Valapour, Maryam**

**Journal Publications:**

Valapour M, Skeans MA, Heubner BM, Smith JM, Schnitzler, Hertz MI, Edwards LB, Israni AK, Snyder JJ, Kasiske BL. Lung [chapter] in: Organ Procurement and Transplantation Network (OPTN) and Scientific Registry of Transplant Recipients (SRTR). OPTN/SRTR 2012. Annual Data Report. Rockville, MD: Department of Health and Human Services, Health Resources and Services Administration, Healthcare Systems Bureau, Division of Transplantation. *American Journal of Transplantation* 2014 Jan; 14 (S1): 139-165.

Valapour M, Paulson K, Smith JM, Hertz MI, Skeans MA, Heubner BM, Edwards LB, Snyder JJ, Israni AK, Kasiske BL. Lung [chapter] in: Organ Procurement and Transplantation Network (OPTN) and Scientific Registry of Transplant Recipients (SRTR). OPTN/SRTR 2011 Annual Data Report. Rockville, MD: Department of Health and Human Services, Health Resources and Services Administration, Healthcare Systems Bureau, Division of Transplantation. *American Journal of Transplantation* 2013 Jan; 13 (S1): 149-177.

Snyder JJ, Salkowski N, Leighton T, Valapour M, Israni AK, Hertz MI, Kasiske BL. The Equitable Allocation of Deceased Donor Lungs for Transplant in Children in the United States. *American Journal of Transplantation* 2013 Jan; 14 (1): 178-83.

Gries CJ, White DB, Truog R, DuBois J, Cosio CC, Dhanani S, Chan K, Corris P, Dark J, Fulda G, Glazier AK, Higgins R, Love R, Mason DP, Nakagawa TA, Shapiro R, Shemie S, Tracy MF, Travaline JM, Valapour M, West L, Zaas D, Halpern SD. An Official American Thoracic Society, International Society for Heart and Lung Transplantation, Society of Critical Care Medicine, Association of Organ and Procurement Organizations and United Network of Organ Sharing Statement: Ethical and Policy Considerations in Organ Donation after Circulatory Determination of Death. *American Journal of Respiratory and Critical Care Medicine* 2013 Jul 1; 188(1); 103-9.

Valapour M, Paulson K, Hilde A. Strengthening Protections for Human Subjects: Proposed Restrictions on Publication of Transplantation Research Involving Prisoners. *Liver Transplantation* 2013 Apr; 19(4): 362-8.

**Zein, Joe**

**Journal Publications:**



Tonelli AR, Zein J, Adams J, Ioannidis JP. Effects of interventions on survival in acute respiratory distress syndrome: an umbrella review of 159 published randomized trials and 29 meta-analyses. **Intensive Care Med.** 2014 Jun;40(6):769-87.

Tonelli AR, Zein J, Ioannidis JPA. Geometry of the randomized evidence for treatments of pulmonary hypertension. **Cardiovasc Ther.** 2013 Dec;31(6):e138-e146.

Zein JG. Should all patients with asthma receive statins? **Am J Respir Crit Care Med.** 2013 Nov 15;188(10):1177-1178.

*Grants*  
*2013-2014*

## **FEDERAL GRANTS AND CONTRACTS**

### **National Institutes of Health (NIH)**

### **Principal Investigator**

Asthma Inflammation in Research (AIR)  
(P01) (HL 103453)

Mark A. Aronica, MD

Immune Mechanisms of Rejection in Human Lung  
Allografts (R01) (HL 056643)

Marie M. Budev, DO

Treatment of Anti-HLA Antibodies to Prevent BOS  
after Lung Transplantation (R34) (HL 105412)

Marie M. Budev, DO

Lung Transplant Clinical Trials Network (LT-CTN)  
(U01 AI113315)

Marie M. Budev, DO

Idiopathic Pulmonary Fibrosis Clinical Research  
Network (U10) (HL080413)

Daniel A. Culver, DO

Genetic Risk for Granulomatous Interstitial Lung  
Disease (R01 HL114587)

Daniel A. Culver, DO

Microbial Induction of Sarcoidosis CD4+ T Cell  
Dysfunction (R01) (HL 117074)

Daniel A. Culver, DO

Treating Sarcoidosis Patients with Nicotine

Daniel A. Culver, DO

Hyaluronan Matrices in Vascular Pathologies  
(P01) (HL107147)

Raed A. Dweik, MD

Asthma Inflammation Research (AIR) (P01)  
(HL103453)

Raed A. Dweik, MD

Pulmonary Vascular Complications of Liver Disease  
(R01) (HL 113988)

Raed A. Dweik, MD

Novel Therapeutics for Alcoholic Hepatitis -  
Cleveland Translational Component (U01)  
(AA021890)

Raed A. Dweik, MD

Airway Redox Biochemistry as a Determinant of Asthma Phenotype During Adolescence (U10) (HL109250)	Raed A. Dweik, MD
Nitric Oxide in Pulmonary Hypertension (R37) (HL 060917)	Serpil C. Erzurum, MD
Clinical and Translational Science Award (CTSA) (2UL1) (TR000439-06)	Serpil C. Erzurum, MD
KIA-The Effects of Ckit Inhibition by Imatinib in Asthma (U01) (HL102225)	Serpil C. Erzurum, MD
Asthma Inflammation Research (AIR) (P01) (HL103453)	Serpil C. Erzurum, MD
Airway Redox Biochemistry as a Determinant of Asthma Phenotype During Adolescence and Adulthood (U10) (HL109250)	Serpil C. Erzurum, MD
Pulmonary Vascular Right Ventricular Axis Research Program (R01) (HL 115008)	Serpil C. Erzurum, MD
Severe Asthma Research Program Capitulated - SARP (U10) (HL109086)	Serpil C. Erzurum, MD
Redefining Pulmonary Hypertension Through Pulmonary Vascular Disease Phenomics: Data Coordinating Center (DCC)	Serpil C. Erzurum, MD
Aggressive Antibiotic Therapy on Antimicrobial Resistance in Patients with Pneumonia Requiring Mechanical Ventilation (HHSN2722001000043C)	R. Duncan Hite, MD
Ganciclovir/Valganciclovir for Prevention of Cytomegalovirus Reactivation in Acute Lung Injury (U01) (HL 102547)	R Duncan Hite, MD
Vitamin C Infusion for Treatment in Sepsis Induce Acute Lung Injury (UM1) (HL 116885)	R Duncan Hite, MD

Prevention and Early Treatment of Acute Lung Injury Clinical Trials Network (PETAL)	R Duncan Hite, MD
T-Cell Epitope Characterization in Cockroach Allergy (U19) (AI100276)	David M. Lang, MD
Validation of a Multigene Test for Lung Cancer Risk (RC2) (CA148572)	Peter J. Mazzone, MD
Cut-Point Optimization for Risk Test (CPORT) (R01) (HL108016)	Peter J. Mazzone, MD
Development of a Multi-Gene Test for COPD and Lung Cancer (LC-COPD) (R01) (HL108016)	Peter J. Mazzone, MD
Ambrisentan and Tadalafil Therapy in Pulmonary Hypertension Associated with Scleroderma (P50) (HL 084946)	Omar A. Minai, MD
Role of FAK-Related-Non-Kinase in Lung Fibrosis (R01) (HL 085324)	Mitchell A. Olman, MD
Deranged Coagulation and Fibrinolytic Cascades in Idiopathic Pulmonary Fibrosis (R01) (HL 103553)	Mitchell A. Olman, MD
Long Term Oxygen Treatment Trial (LOTT) in Patients with COPD (N01) (HR 76184)	James K. Stoller, MD
Simvastatin in the Prevention of COPD Exacerbations (U01) (HL 074422)	James K. Stoller, MD
Vascular Dysfunction in Pulmonary Arterial Hypertension (CTSA KL2) (TR-000440 )	Adriano R. Tonelli, MD
ARDS Clinical Center (N01) (HR 56168)	Herbert P. Wiedemann, MD
Trial of Aromatase Inhibition in Lymphangioleiomyomatosis (TRAIL) (W81XWH-10-1-0885)	Joseph G. Parambil, MD

## **PROFESSIONAL SOCIETY GRANTS**

### **Alpha One Foundation**

Effect of Alpha-1 Antitrypsin Deficiency Training  
on Detection Rate

### **Principal Investigator**

James K. Stoller, MD

### **American Heart Association**

Transplant and Preparation Center (CMREF)

Serpil C. Erzurum, MD

### **Howard Hughes Medical Institute**

Effector Cell Development and Lineage  
Commitment in Allergic Inflammation (2008ECA)

Fred H. Hsieh, MD

### **Partnership for Cures and LUNgevity Foundation**

Identification of Lung Cancer through the Analysis  
of Exhaled Breath

Peter J. Mazzone, MD

## **INDUSTRY AND OTHER SOURCES**

### **Project Title**

### **Principal Investigator**

Functional Assessment of End-Stage Lung Disease  
in Patients Undergoing Lung Transplantation

Marie M. Budev, DO

Decision Making for Emphysema Patients  
Considering Lung Transplantation (DECIDE)

Marie M. Budev, DO

Lung Transplant and Cognitive Impairment

Marie M. Budev, DO

Prevalence of Erectile Dysfunction in Lung  
Transplant Recipients

Marie M. Budev, DO

Ghrelin, Adipokines and Biologic Markers in Primary Graft Dysfunction after Lung Transplantation	Marie M. Budev, DO
STX-100 in Patients with Idiopathic Pulmonary Fibrosis	Daniel A. Culver, DO
Intravenous Infusion of Human Placenta-Derived Cells (PDA001) for Stage II or III Sarcoidosis	Daniel A. Culver, DO
Registry of Patients with Sarcoidosis Associated Pulmonary Hypertension	Daniel A. Culver, DO
RIP2 Kinase Inhibition in Sarcoidosis	Daniel A. Culver, DO
Lysophosphatidic Acid Receptor Antagonist in Patients with Idiopathic Pulmonary Fibrosis	Daniel A. Culver, DO
Effects of ARA 290 on Corneal Nerve Fiber Density and Neuropathic Symptoms of Subjects with Sarcoidosis	Daniel A. Culver, DO
FG-3019 in Patients with Idiopathic Pulmonary Fibrosis	Daniel A. Culver, DO
S100 $\beta$ Levels in Neurosarcoidosis	Daniel A. Culver, DO
Idiopathic Pulmonary Fibrosis Prospective Outcomes Registry	Daniel A. Culver, DO
AirWave for the Assessment of Correct Endotracheal Tube Placement	Gustavo Cumbo-Nacheli
Registry to Evaluate Early and Long-Term Pulmonary Arterial Hypertension Disease Management	Raed A. Dweik, MD
Efficacy, Safety and Tolerability and PK Trial of Nilotinib in Pulmonary Arterial Hypertension	Raed A. Dweik, MD
Macitentan in Eisenmenger Syndrome to Restore Exercise Capacity	Raed A. Dweik, MD

Pulmonary Arterial Hypertension Quality Enhancement Research Initiative Extension Program	Raed A. Dweik, MD
Oral Iron Supplementation in Pulmonary Hypertension	Samar Y. Farha, MD
Prospective Observational Study to Evaluate Predictors of Clinical Effectiveness in Response to Omalizumab	James M. Fernandez, MD, PhD
Airway Epithelium Gene Expression in the Diagnosis of Lung Cancer	Thomas R. Gildea, MD
AeriSeal System for Hyperinflation Reduction in Emphysema	Thomas R. Gildea, MD
Estimation of the Incidence of Ventilator-Associated Pneumonia caused by Pseudomonas Aeruginosa	Jorge A. Guzman, MD
ART-123 in Subjects with Severe Sepsis and Coagulopathy	Jorge A. Guzman, MD
Efficacy and Safety of Plazomicin Compared with Colistin in Patients with Infection due to Carbapenem-Resistant Enterobacteriaceae	Jorge A. Guzman, MD
Intra-Subject Variability of Total IgE Levels in Patients with Moderate to Severe Asthma and Atopy Over One Year	Umur S. Hatipoglu, MD
Compassionate Use of Anti IL-5 (Mepolizumab) in Subjects with Hypereosinophilic Syndrome	Fred H. Hsieh, MD
Mast Cell Infiltration, Phenotypes and Activation in the Allograft after Lung Transplantation	Fred H. Hsieh, MD
BAY 63-2521 in Patients with Chronic Thromboembolic Pulmonary Hypertension	Gustavo A. Heresi, MD
Insulin Resistance in Pulmonary Arterial Hypertension	Gustavo A. Heresi, MD



Inhaled Nitric Oxide as Add On Therapy in Symptomatic Patients with Pulmonary Arterial Hypertension	Gustavo A. Heresi, MD
Riociguat in Patients with In-Operable CTEPH or Persisting PH after Surgical Treatment	Gustavo A. Heresi, MD
Assess the Effects of Oral Sildenafil on Mortality in Adults with Pulmonary Arterial Hypertension	Gustavo A. Heresi, MD
Efficacy and Safety of Riociguat in Patients with Symptomatic Pulmonary Hypertension Associated with Idiopathic Interstitial Pneumonias	Gustavo A. Heresi, MD
Ticagrelor for Severe Community Acquired Pneumonia	R. Duncan Hite, MD
Safety and Efficacy of H.P. Acthar® Gel in Subjects with ARDS	R. Duncan Hite, MD
Vasopressin for Circulatory Shock in Patients with Pulmonary Arterial Hypertension	Anachal Kapoor, MD
Post-FDA Approval Clinical Trial Evaluating Bronchial Thermoplasty in Severe Persistent Asthma	Sumita B. Khatri, MD
A Longitudinal Study for Disease Profiling of Asthma	Sumita B. Khatri, MD
Mepolizumab Adjunctive Therapy in Severe Uncontrolled Refractory Asthma	Sumita B. Khatri, MD
Eisenmenger Quality Enhancement Research Initiative	Richard Krasuski, MD (Raed Dweik, MD Co-Investigator)
Adult Congenital Heart Disease Quality Enhancement Research Initiative	Richard Krasuski, MD (Raed Dweik, MD Co-Investigator)
Therapeutic Use of Xolair for Aspirin Induced Bronchospasm	David M. Lang, MD

Mometasone Furoate/Formoterol Fumarate Fixed Dose Combination versus Mometasone Furoate Monotherapy in Patients with Persistent Asthma	David M. Lang, MD
IBV Valve System for the Treatment of Prolonged Air Leak	Michael S. Machuzak, MD
Lung Function Improvement after Bronchoscopic Lung Volume Reduction with Pulmonx Endobronchial Valves Used in Emphysema	Michael S. Machuzak, MD
Identification and Validation of Breath Biomarkers of Early Lung Cancer with a Colorimetric Sensor Array	Peter J. Mazzone, MD
Correlation of Breath Studies in a Variety of Human Samples	Peter J. Mazzone, MD
Early Diagnosis of Pulmonary Nodules Using a Plasma Proteomic Classifier	Peter J. Mazzone, MD
Blood and Urine Biorepository for Lung Cancer Test Development	Peter J. Mazzone, MD
Technical Validation of Breath and Urine Collection and Processing Considerations	Peter J. Mazzone, MD
Trial of the Intrabronchial Valve System	Atul C. Mehta, MD
Lung Volume Reduction Coil Treatment in Patients with Emphysema	Atul C. Mehta, MD
Oral BAY 63-2521 in Patients with Pulmonary Arterial Hypertension	Omar A. Minai, MD
Ambrisentan and Tadalafil Combination Therapy in Pulmonary Arterial Hypertension	Omar A. Minai, MD
Six MWT, BNP, and Nocturnal Hypoxia as Predictors of Pulmonary Arterial Hypertension in Patients with Idiopathic Pulmonary Fibrosis	Omar A. Minai, MD

Treatment with UT15 in Patients with Pulmonary Arterial Hypertension	Joseph G. Parambil, MD
Macitentan in Pulmonary Arterial Hypertension to Validate the PAH-SYMPACT	Joseph G. Parambil, MD
Efficacy Safety of Pirfenidone in Patients with IPF	Joseph G. Parambil, MD
Efficacy and Safety of GS-6624 in Subjects with Idiopathic Pulmonary Fibrosis	Joseph G. Parambil, MD
Roflumilast to Prevent Exacerbations in Fibrotic Sarcoidosis Patients	Joseph G. Parambil, MD
Treatment Protocol to Allow Patients in the US with Idiopathic Pulmonary Fibrosis Access to Pirfenidone	Joseph G. Parambil, MD
Effect of Patient Volume in Intensive Care Unit on Mortality and Length of Stay	Haala Rokadia, MD
Coenzyme Q10 for the Treatment of Pulmonary Arterial Hypertension	Jacqueline Sharp, RN
Lung Matrix Signals Drive Fibrosis through Myosin II Activation in Idiopathic Pulmonary Fibrosis	Brian D. Southern, MD
Patient Registry to Observe the Real-World Dosing and Titration of Tyvaso	Adriano R. Tonelli, MD