CURRICULUM VITAE MATTHEW DMITRI JANKOWICH, M.D.

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EDUCATION

1994	Dartmouth College, Hanover, NH A.B. cum laude Genetics, Cell and Developmental Biology
1999	Ohio State University College of Medicine, Columbus, OH M.D.

POST-GRADUATE TRAINING

1999- 2000	Intern, Internal Medicine, Yale-New Haven Hospital, New Haven, CT
2000-2001	Resident, Diagnostic Radiology Boston Medical Center, Boston, MA
2001-2003	Resident, Internal Medicine Beth Israel Deaconess Medical Center, Boston, MA
2004-2007	Fellowship, Pulmonary and Critical Care Medicine Brown Medical School, Providence, RI

POSTGRADUATE HONORS AND AWARDS

2010:	Certificate of Recognition for Exemplary Teaching, Warren Alpert Medical School of Brown University, BIOL 3663 IMS III: Pulmonary Small Groups
2011:	Certificate of Recognition for Exemplary Teaching, Warren Alpert Medical School of Brown University, BIOL 3662 IMS III: Pulmonary
2012:	Dean's Excellence in Teaching Award, Warren Alpert Medical School of Brown University, BIOL 3662 IMS III: Pulmonary
2014:	Certificate of Recognition for Exemplary Teaching in BIOL 3662 IMS III: Pulmonary, Warren Alpert Medical School of Brown University
2015:	Teacher of the Year Award, Division of Pulmonary, Critical Care and Sleep Medicine, Warren Alpert Medical School of Brown University

2016:	Dean's Excellence in Teaching Award, Warren Alpert Medical School of Brown University, BIOL 3662 IMS III: Pulmonary
2018:	Master of Arts ad eundem, Brown University
2019:	Letter of Recognition, "Positive Champion of the Learning Environment", Alpert Medical School of Brown University
2019:	Dean's Excellence in Teaching Award, Warren Alpert Medical School of Brown University, Clerkship in Medicine

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Diplomate in Internal Medicine, American Board of Internal Medicine: Certified, August 2004

Diplomate in Pulmonary Disease, American Board of Internal Medicine: Certified, October 2006.

Diplomate in Critical Care Medicine, American Board of Internal Medicine: Certified, October 2007.

Massachusetts Board of Registration in Medicine, license number 214099; license issued August 7th, 2002.

ACADEMIC APPOINTMENTS

July 2007-June 2009	Instructor in Medicine, Alpert Medical School of Brown University
July 2009-June 2017	Assistant Professor of Medicine, Alpert Medical School of Brown University
July 2017-	Associate Professor of Medicine, Alpert Medical School of Brown University

HOSPITAL APPOINTMENTS

2007-	Staff physician, Division of Pulmonary and Critical Care Medicine, Providence VA Medical Center
2007-	Investigator, Vascular Research Laboratory, Providence VA Medical Center,
2007-2013 2015-2016 2019-2020	Medical Director, Intensive Care Unit, Providence VA Medical Center
2012-	Co-Director (Clinical/Pulmonary), Pulmonary Hypertension Clinic, Providence VA Medical Center This is a unique multidisciplinary clinic that serves patients with known or suspected pulmonary hypertension at the Providence VA Medical Center; the clinic is staffed by both pulmonary medicine and cardiology physicians and has served as an educational site for preventive cardiology fellows, pharmacy

	residents, students and other trainees, as well as a hub for an expanding amount of translational and clinical pulmonary hypertension research.
2020-2021	Co-Director (Intensivist), COVID-19 Inpatient Unit, Providence VA ` Medical Center
	Director of pulmonary and critical care for COVID-19 inpatient unit, attending physician for critically ill COVID-19 patients.
2021 (May)-	Associate Chief of Staff/Education, Providence VA Medical Center VA Providence Healthcare System education learning leader with oversight and responsibility for affiliated clinical trainee programs at the medical center

HOSPITAL COMMITTEES

2007-	Member, Lung Cancer Management Committee, Providence VA Medical Center
2007-2013 2015-2016	Chair, Special Care Committee, Providence VA Medical Center
2019-2020	This committee focuses on issues related to emergency and intensive care medicine at the Providence VA Medical Center, including resuscitation review and critical care policy development.
2010-2010	Member, Peer Review Committee, Providence VA Medical Center
2015-	Member, Operative and Invasive Procedures Committee, Providence VA Medical Center
2021-	Chair, Education Leadership Committee, Providence VA Medical Center

OTHER APPOINTMENTS

Editorial Board Member

Physiological Reports (2021-)

Ad hoc reviewer for:

Allergy, Asthma & Clinical Immunology (2015) American Journal of Epidemiology (2019) American Journal of Respiratory and Critical Care Medicine (2021, 2022) Annals of the American Thoracic Society (2019 x 2, 2020, 2021, 2022 x 2, 2023 x 2) BMC Cardiovascular Disorders (2015) BMC Pulmonary Medicine (2012, 2013) British Journal of Anaesthesia (2017) Case Reports in Pulmonology (2017) Chest (2012, 2013, 2016, 2017, 2021 x 3, 2022 x 3, 2023) European Respiratory Journal (2010, 2012-2015) Frontiers in Cardiovascular Medicine (2021) Heart & Lung: The Journal of Acute and Critical Care (2013, 2017-2019) Hypertension (2023) International Journal of Chronic Obstructive Pulmonary Disease (2011, 2014-2016) JAMA Cardiology (2017, 2020) Journal of Alternative and Complementary Medicine (2015) Journal of Alzheimer's Disease (2022) Journal of Epidemiology & Community Health (2020) Journal of Thoracic Disease (2018) Lung (2010, 2011, 2013, 2014) Physiological Reports (2020, 2021 x 2, 2022, 2023 x 3) PLoS One (2011, 2014-2018) Pulmonary Circulation (2021, 2023) Respiration (2014, 2015) Respiratory Research (2014, 2023) Respirology (2009-2015) Thorax (2015)

Professional Society Committees and Appointments:

2009-2012	Member, Young Academicians Working Group, Critical Care Assembly, American Thoracic Society.
2015-2016	Member, Quality Improvement Committee, American Thoracic Society

- --This committee evaluates quality standards related to pulmonary, critical care and sleep medicine and considers opportunities for ATS participation in performance improvement movements in order to advance the quality and science behind performance improvement.
- 2010-Abstract Reviewer, American College of Chest Physicians annual meetings: (CHEST 2010 Annual Meeting, CHEST 2011 Annual Meeting, CHEST 2012 Annual Meeting, CHEST 2014 Annual Meeting, CHEST 2015 Annual Meeting, CHEST World Congress 2016, CHEST 2016 Annual Meeting, CHEST 2017 Annual Meeting, CHEST 2020 Annual Meeting, CHEST 2021 Annual Meeting, CHEST 2022 Annual Meeting, CHEST 2023 Annual Meeting)

Search Committees

2021	Member, Search Committee for Chief of Cardiology, Providence VA Medical Center Outcome: Search completed and position filled
2022	Member, Search Committee for Associate Dean of Medical Education, Warren Alpert Medical School of Brown University <i>Outcome: Search completed and position filled</i>
2024-	Member, Search Committee for Department Chair of Surgery, Warren Alpert Medical School of Brown University In progress
Other: 2012-2013 & 2013-2014	Co-organizer, Brown Pulmonary Research Conference Seminar Series
2021-	Member, Board of Directors, Ocean State Research Institute
2018-	Member, Executive Committee, Ronald McDonald House of Providence Running Club

MEMBERSHIP IN SOCIETIES

2005-	American Thoracic Society
2008-	American Association of Bronchology and Interventional Pulmonology
2009-	American College of Chest Physicians
	2009- Fellow, American College of Chest Physicians
2010-	Rhode Island Thoracic Society 2010-
	2013-2014: Vice president
	2014-2015: President
2015-	Pulmonary Vascular Research Institute

PUBLICATIONS LIST

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- Jankowich MD, Wahidi MM, Feller-Kopman D, and Ernst A. Pulmonary alveolar proteinosis diagnosed in pregnancy and managed with whole-lung lavage. *J of Bronchology* 2006; 13: 204-206. doi: 10.1097/01.lbr.0000212545.32835.2d.
- Lu Q, Harrington EO, Newton J, <u>Jankowich M</u>, and Rounds S. Inhibition of ICMT induces endothelial cell apoptosis through GRP94. *Am J Respir Cell Mol Biol* 2007; 37(1): 20-30. PMID 17347446.
- 3. <u>Jankowich M</u>, Sameed YA, and Abu-Hijleh, M. A 21-year-old man with fever and sore throat rapidly progressive to hemoptysis and respiratory failure. Diagnosis: Lemierre syndrome with Fusobacterium necrophorum sepsis. *Chest* 2007; 132: 1706-1709. PMID 17998376.
- 4. <u>Jankowich M</u>, Polsky M, Klein M, and Rounds S. Heterogeneity in combined pulmonary fibrosis and emphysema. *Respiration* 2008; 75: 411-417. PMID 17684315.
- Lu Q*, <u>Jankowich M</u>*, Newton J, Harrington EO, Rounds S. Alterations in molecular chaperones and EIF2α during lung endothelial cell apoptosis. *Amer J Physiol: Lung Cellular and Molecular Physiology* 2010; 298: L501-L508. (*Equal contributions). PMID 20097734.
- <u>Jankowich M</u>, Taveira T, Wu W-C. Decreased lung function is associated with increased arterial stiffness as measured by peripheral pulse pressure: data from NHANES III. *Am J Hypertens* 2010; 23; 614-619. PMID 20224559.*
 *Comment in: Bolton CE, Cockcroft JR. Lung function and cardiovascular risk: a stiff challenge? *Am J Hypertens* 2010; 23: 584.
- Jankowich MD, Rounds S. Combined pulmonary fibrosis and emphysema results in altered physiology but has similar mortality to pulmonary fibrosis without emphysema. *Lung* 2010; 188: 365-373. PMID 20614219.
- Jankowich M, Choudhary G, Taveira TH, Wu WC. Age-, race-, and gender-specific prevalence of diabetes among smokers. *Diabetes Res Clin Pract* 2011; 93: 101-105. doi:10.1016/j.diabres.2011.05.29. PMID 21680039.
- 9. Jankowich MD, Rounds SI. Combined pulmonary fibrosis and emphysema syndrome—a review. *Chest* 2012; 141(1): 222-231. PMID: 22215830.

- 10. Sears EH*, Jankowich MD, Healey TT. A slow growing non-calcified airway mass. *Med Health RI* 2012; 95: 264-265. PMID: 22970471.
 *Fellow, Pulmonary and Critical Care Medicine, Brown University
- Maron BA, Choudhary G, Khan U, Jankowich MD, McChesney H, Ferrazzani SJ, Gaddam S, Sharma S, Opotowsky AR, Bhatt DL, Rocco TP, Aragam JR. The clinical profile and underdiagnosis of pulmonary hypertension in U.S. veteran patients. *Circulation Heart Fail* 2013; 6(5): 906-912. [Epub ahead of print Jun 27]. PMID: 23811965.
- 12. Choudhary G, Jankowich M, Wu W-C. Prevalence and clinical characteristics associated with pulmonary hypertension in African-Americans. *PLoS ONE* 2013 Dec 16; 8(12): e84264. PMID: 24358351.
- Maron BA, Goldstein RH, Rounds SI, Shapiro S, Jankowich M, Garschick E, Moy ML, Gagnon D, Choudhary G. Study design and rational for investigating phosphodiesterase type 5 inhibition for the treatment of pulmonary hypertension due to chronic obstructive lung disease: the TADA-PHiLD (TADAlafil for Pulmonary Hypertension associated with chronic obstructive Lung Disease) trial. *Pulmonary Circulation* 2013 Dec; 3(4): 889-897. PMID: 25006405.
- 14. Choudhary G, Jankowich M, Wu W-C. Elevated pulmonary artery systolic pressure predicts heart failure admissions in African Americans: Jackson Heart Study. *Circulation Heart Failure*, 2014 Jul; 7(4): 558-564. PMID: 24902739.
- Steiner J*, Wu W-C, Jankowich M, Maron BA, Sharma S, Choudhary G. Echocardiographic predictors of mortality in patients with pulmonary hypertension and cardiopulmonary comorbidities. *PLoS ONE* 2015 Mar 16; 10(3): e0119277. PMID: 25774911.
 *Fellow, Cardiology, Brown University
- 16. Wojtaszczyk A*, Jankowich M. Dyspnea on daptomycin: eosinophilic pneumonia. *RI Med J* (2013). 2015 Jun 1; 98(6): 41-43. PMID: 26020264.
 *Resident, Internal Medicine, Brown University
- 17. Godfrey MS*, <u>Jankowich MD</u>. The Vital Capacity is Vital: Epidemiology and Clinical Significance of the Restrictive Spirometry Pattern. *Chest* 2016; 149(1): 238-251. Doi: 10.1378/chest. 15-1045. Epub 2016 Jan 6. Review. PMID: 26356330.
 *Resident, Internal Medicine, Brown University
- Jankowich M, Wu W-C, Choudhary G. Elevated plasma endothelin-1 levels are associated with pulmonary hypertension, mortality and heart failure in African-American Individuals: the Jackson Heart Study. *JAMA Cardiology* 2016 Jul 1; 1(4): 461-469. PMID: 27438323.
- Okereke IC, Bates MF, Jankowich MD, Rounds SI, Kimble BA, Baptiste JV*, Ng TT, Nici LL. Effects of implementation of lung cancer screening at one Veterans Affairs Medical Center. *Chest* 2016 Nov; 150(5): 1023-1029. Epub 2016 Aug 25. PMID: 27568228.
 *Fellow, Pulmonary and Critical Care Medicine, Brown University
- Uppal P, LaPlante KL, Gaitanis MM, <u>Jankowich MD</u>, Ward KE. Daptomycin-Induced Eosinophilic Pneumonia – A Systematic Review. *Antimicrobial Resistance and Infection Control* 2016; 5: 55. DOI 10.1186/s13756-106-0158-8. eCollection 2016. Review. PMID: 27999664.

- Jankowich M, Elston B, Evans SK*, Wu W-C, Choudhary G. Relationship of iron deficiency and serum ferritin levels with pulmonary hypertension: The Jackson Heart Study. *PLoS ONE* 2016; 11(12): e0167987. doi:10.1371/journal.pone.0167987. eCollection 2016. PMID: 27973582.
 *Fellow, Pulmonary and Critical Care Medicine, Brown University
- Jankowich M, Hebel R, Jantz J*, Abbasi S, Choudhary G. Multispecialty Pulmonary Hypertension Clinic in the VA. *Pulm Circ*. 2017; Oct-Dec;7(4): 758-767. doi: 10.1177/2045893217726063. Epub 2017 Aug 22. PMID: 28770656.
 *Fellow, Preventive Cardiology, Brown University
- 23. Jankowich M, Elston B, Liu Q*, Abbasi S, Wu WC, Blackshear C, Godfrey M**, Choudhary G. Restrictive spirometry pattern, cardiac structure and function, and incident heart failure in African-Americans: The Jackson Heart Study.[†] Ann Am Thorac Soc 2018 Oct; 15(10): 1186-1196. doi: 10.1513/AnnalsATS.201803-184OC. PMID: 30011374.
 *PhD Candidate, Department of Epidemiology, Brown University
 **Resident/Chief Resident, Internal Medicine
 [†]Comment in: Balasubramanian A, Putcha N. "Restrictive Spirometry and Cardiovascular Risk: Cause or Comorbidity?" Ann Am Thoracic Soc 2018; 15:1142-1143.
- 24. Gartman E*, Jankowich M*, Baptiste J**, Schiff A**, Nici L. Outcomes of the first three years of a lung cancer screening program at a Veterans Affairs Medical Center. Ann Am Thorac Soc 2018 Nov; 15(11): 1362-1365. doi 10.1513/AnnalsATS201805-298RL. PMID: 30059245.
 *Equal contributions

 **Fellows, Pulmonary and Critical Care Medicine, Brown University
- Kolte D*, Laskshmanan S**, <u>Jankowich MD</u>, Brittain EL, Maron BA, Choudhary G. Mild pulmonary hypertension is associated with increased mortality: a systematic review and metaanalysis. *J Am Heart Assoc* 2018; Sep 18; 7(18): e009729. DOI: 10.1161/JAHA.118009729. PMID: 30371195.

*Fellow, Cardiology, Brown University **Master's degree candidate, Brown University

- Jankowich M, Choudhary G. Endothelin-1 levels and cardiovascular events. *Trends Cardiovasc Med* 2019 Feb 1. pii: S1050-1738(18)30233-0. doi: <u>https://doi.org/10.1016/j.tcm.2019.01.007</u>. [Epub ahead of print] Review. PMID: 30765295.
- Jankowich M, Abbasi SA, Vang A, Choudhary G. Right ventricular fibrosis is related to pulmonary artery stiffness in pulmonary hypertension: a cardiac magnetic resonance imaging study. *Am J Respir Crit Care Med* 2019; 200(6): 776-779. <u>doi.org/10.1164/rccm.201903-</u> 0580LE. No abstract available. PMID: 31144985.*

*Comment in: Simpson CE, Hassoun PM. Myocardial fibrosis as a potential maladaptive feature of RV remodeling in pulmonary hypertension. *Am J Respir Crit Care Med* 2019; 200(6): 662-663. doi.org/10.1164/rccm.201906-1154ED. PMID: 3126171.

 Imran H*, Jankowich M, Choudhary G. Pulmonary Hypertension Post Liver-Kidney Transplant. *R I Med J (2013)*. 2019 Nov 1;102(9):23-26. PMID: 3165782.
 *Fellow, Preventive Cardiology, Brown University

- 29. Lee S*, Lacy ME, Jankowich M, Correa A, Wu W-C. Association between obesity phenotypes of insulin resistance and risk of type 2 diabetes in African-Americans: The Jackson Heart Study. *Journal of Clinical & Translational Endocrinology* 2019 Nov 20; 19: 100210; doi: 10.1016/j.jcte.2019.100210. eCollection 2020 Mar. PMID: 31871895.
 *Medical student, Alpert Medical School of Brown University
- 30. Lakshmanan S*, Jankowich M, Wu W-C, Blackshear C, Abbasi S, Choudhary G. Gender differences in risk factors associated with pulmonary artery systolic pressure, heart failure, and mortality in blacks: Jackson Heart Study. *J Am Heart Assoc.* 2020;9:e013034. DOI: 10.1161/JAHA.119.013034. PMID: 31902323.
 *Graduate student, Brown University School of Public Health
- Lakshmanan S*, <u>Jankowich M</u>, Wu W-C, Abbasi S, Morrison AR, Choudhary G. Association of plasma adiponectin with pulmonary hypertension, mortality and heart failure in African-Americans: Jackson Heart Study. *Pulm Circ*. 2020 Nov 11; 10(4): 2045894020961242. doi: 0.1177/2045894020961242. eCollection 2020 Oct-Dec. PMID: 33240486.
 *Graduate student, Brown University School of Public Health
- Vecchio M*, Jankowich M, Qadir H, Gaitanis M, Menon A. Cognitive biases in the era of COVID-19: A case of *Clostridium sporogenes* bacteremia in a patient with small bowel obstruction. *Case Rep Infect Dis.* 2020 Dec 5: 2020:8812635. eCollection 2020. PMID: 33335786.

*Resident, Internal Medicine, Brown University

- Jankowich M, Maron BA, Choudhary G. Mildly elevated pulmonary artery systolic pressure on echocardiography: bridging the gap in current guidelines. *The Lancet Respir Med.* 2021 Jul 13:S2213-2600(21)00072-2. <u>https://doi.org/10.1016/S2213-2600(21)00072-2</u>. Online ahead of print. PMID: 34270923.
- 34. Qureshi R*, Vayntrub Y**, Aswad B, Choudhary G, Jankowich M. Dyspnea, elevated jugular venous pulse, and lower extremity edema in the setting of interstitial lung disease in a patient who has undergone liver and kidney transplantation. *Chest* 2021; 160 (3): e296-e298. doi: 10.1016/j.chest.2021.03.051. PMID: 34488971.

*Fellow, Preventive Cardiology, Brown University **Fellow, Pulmonary and Critical Care Medicine, Brown University

35. Zeba F*, Yanning W, Melek J, Duan F, Atalay MK, <u>Jankowich M</u>, Rounds S. Prognostic significance of pulmonary artery to aorta ratio and other CT markers in pulmonary fibrosis with and without emphysema. *Lung* 2021; 199(6): 677-680. doi: 10.1007/s00408-021-00490-2. PMID: 34741227.

*Resident, Kent Hospital Internal Medicine, Brown University

- 36. Vayntrub Y*, Gartman E, Nici L, Jankowich MD. Diagnostic performance of the Herder Model in Veterans undergoing PET scans for pulmonary nodule evaluation. *Lung* 2021; 199(6): 653-657. doi: 10.1007/s00408-021-00495-x. Online ahead of print. PMID: 34787695.
 *Fellow, Pulmonary and Critical Care Medicine, Brown University
- 37. Maron BA, Choudhary G, Goldstein RL, Garshick E, <u>Jankowich M</u>, Tucker TJ, LaCerda KA, Hattler B, Dempsey EC, Sadikot RT, Shapiro S, Rounds SI, Goldstein RH. Tadalafil for veterans with chronic obstructive pulmonary disease-pulmonary hypertension: A multicenter, placebo-

controlled randomized trial. *Pulm Circ*. 2022 March 14; 12(1):e12043. doi: 10.1002/pul2.12043. eCollection 2022 Jan. PMID: 35506072.

- 38. Branch-Elliman W, Ferguson R, Doros G, Woods P, Leatherman S, Strymish J, Datta R, Goswani R, <u>Jankowich MD</u>, Shah NR, Taylor TH, Page ST, Schiller SJ, Shannon C, Hau C, Flynn M, Holmberg E, Visnaw K, Dhond R, Brophy M, Monach PA. Subcutaneous sarilumab for the treatment of hospitalized patients with moderate to severe COVID19 disease: A pragmatic, embedded randomized clinical trial. *PLoS One*. 2022 Feb 25;17(2): e0263591. doi: 10.1371/journal.pone.0263591. eCollection 2022. PMID: 35213547.
- Li G, Jankowich MD, Lu Y, Wu L, Shao L, Ke C. Preserved ratio impaired spirometry, metabolomics and the risk of type 2 diabetes. *J Clin Endocrinol Metab*. 2023 Mar 10:dgad140. Doi: 10.1210/clinem/dgad140. Online ahead of print. PMID: 36897159.
- Li G, <u>Jankowich MD</u>, Wu L, Lu Y, Shao L, Lu X, Fan Y, Pan CW, Wu Y, Ke C. Preserved ratio impaired spirometry and risks of macrovascular, microvascular complications and mortality among individuals with type 2 diabetes. *Chest* 2023 Nov; 164(5): 1268-1280. Epub 2023 Jun 17. PMID: 37356807.

*Comment in: Wade RC, Wells JM. Preserved ratio with impaired spirometry: the lung's contribution to metabolic syndrome. *Chest* 2023; 164(5): 1075-1076.

CORPORATE AUTHORSHIP OR MULTI-SITE TRIALS

41. Meduri GU, Shih MC, Bridges L, Martin TJ, El-Solh A, Seam N, Davis-Karim A, Umberger R, Anzueto A, Sriram P, Lan C, Restrepo MI, Guardiola JJ, Buck T, Johnson DP, Suffredini A, Bell WA, Lin J, Zhao L, Uyeda L, Nielsen L, Huang GD; ESCAPe Study Group*. Low-dose methylprednisolone treatment in critically ill patients with severe community-acquired pneumonia. *Intensive Care Med*. 2022 May 13: doi: 10.1007/s00134-022-06684-3. Online ahead of print. PMID: 35723686.

*Role in Study: Participating Site PI/Member, ESCAPe Study Group

EDITORIALS AND LETTERS TO EDITOR

- 42. <u>Jankowich MD</u>. Idiopathic pulmonary fibrosis in transplantation. *Chest* 2003; 124(6): 2404. PMID 14665532.
- Gartman E, Jankowich M. D for Destiny? Parameter D and Chronic Obstructive Pulmonary Disease. Ann Am Thorac Soc. 2023 Jul;20(7): 953-954. doi: 10.1513/AnnalsATS.202304-373ED. PMID: 37387627.

OTHER PUBLICATIONS

Textbooks Edited:

 Jankowich M and Gartman E. Editors, <u>Ultrasound in the Intensive Care Unit</u>. Respiratory Medicine textbook series. Humana Press, Springer: New York, 2015. DOI 10.1007/978-1-4939-1723-5. This textbook has been licensed by Springer for Chinese Simplified translation and for publication in China by Zhejiang University Press, China.

Textbook Chapters:

- Jankowich M, Choudhary G, and Rounds S. Hypoxia and the Pulmonary Endothelium. In: <u>The</u> <u>Pulmonary Endothelium: Function in Health and Disease</u>. Edited by Sharon Rounds and Norbert Voelkel. John Wiley and Sons, LTD., 2009.
- Rounds S and <u>Jankowich MD</u>. The Lung in Health and Disease. In: <u>Andreoli and Carpenter's</u> <u>Cecil Essentials of Medicine</u>, eighth edition. Edited by Thomas E. Andreoli et al. Saunders Elsevier. Philadelphia, 2010.
- Jankowich MD. Obstructive Lung Diseases. In: <u>Andreoli and Carpenter's Cecil Essentials of</u> <u>Medicine</u>, eighth edition. Edited by Thomas E. Andreoli et al. Saunders Elsevier. Philadelphia, 2010.
- 4. Aliotta JA and <u>Jankowich MD</u>. Interstitial Lung Disease. In: <u>Andreoli and Carpenter's Cecil</u> <u>Essentials of Medicine</u>, eighth edition. Edited by Thomas E. Andreoli et al. Saunders Elsevier. Philadelphia, 2010.
- Rounds S and <u>Jankowich MD</u>. Disorders of Respiratory Control. In: <u>Andreoli and Carpenter's</u> <u>Cecil Essentials of Medicine</u>, eighth edition. Edited by Thomas E. Andreoli et al. Saunders Elsevier. Philadelphia, 2010.
- Aliotta JA and <u>Jankowich MD</u>. Neoplastic Disorders of the Lung. In: <u>Andreoli and Carpenter's</u> <u>Cecil Essentials of Medicine</u>, eighth edition. Edited by Thomas E. Andreoli et al. Saunders Elsevier. Philadelphia, 2010.
- Jankowich M. Thoracic malignancies. In: <u>Chronic Obstructive Pulmonary Disease: Co-Morbidities and Systemic Consequences</u>, first edition, Respiratory Medicine series. Edited by Linda Nici, M.D. and Richard ZuWallack, M.D. Humana Press, Springer; New York 2012.
- 8. <u>Jankowich MD</u>, Martin DW, Choudhary G. Cor Pulmonale. In: <u>Ferri's Clinical Adviser 2013</u>. Edited by Fred F. Ferri, M.D., F.A.C.P. Elsevier Mosby: Philadelphia 2012.
- 9. Jankowich MD, Ferri FF. Pulmonary edema. In: <u>Ferri's Clinical Adviser 2013</u>. Edited by Fred F. Ferri, M.D., F.A.C.P. Elsevier Mosby: Philadelphia 2012.
- 10. Jankowich MD, Ferri FF. Pulmonary embolism. In: <u>Ferri's Clinical Adviser 2013</u>. Edited by Fred F. Ferri, M.D., F.A.C.P. Elsevier Mosby: Philadelphia 2012.
- 11. Jankowich MD, Martin DW, Choudhary G. Pulmonary hypertension. In: Ferri's Clinical Adviser 2013. Edited by Fred F. Ferri, M.D., F.A.C.P. Elsevier Mosby: Philadelphia 2012.
- Evans SK* and Jankowich M. Pleural Ultrasound. In: <u>Ultrasound in the Intensive Care Unit</u>. Respiratory Medicine textbook series. Humana Press, Springer: New York, 2015.
 *Fellow, Pulmonary and Critical Care Medicine
- Rounds S and Jankowich M. Pulmonary Vascular Diseases. In: <u>Andreoli and Carpenter's Cecil</u> <u>Essentials of Medicine</u>, 9th edition. Editor-in-chief Ivor J. Benjamin, MD, FACC, FAHA. Saunders Elsevier, Philadelphia, 2016. ISBN: 978-1-4377-1899-7.
- Jankowich MD and Rounds S. Coexistent COPD and ILD. In: <u>Controversies in COPD</u>. Edited by: Antonio Anzueto, Yvonne Heijdra, and John R. Hurst. European Respiratory Society Monograph Series. DOI: 10.1183/2312508X.erm6915. ISBN electronic: 9781849840644.

Electronic Publications:

1. <u>Jankowich MD</u>. Idiopathic pulmonary fibrosis. In: *First Consult*. Editor-in-Chief Margaret T. Hessen, M.D., F.A.C.P.. Elsevier: Electronically published, February, 2013.

Photographs:

1. "Providence, Rhode Island Harbor as seen from India Point Park". Cover photo for *Annals of the American Thoracic Society*-Volume 15, Number 10 (October 1, 2018).

PUBLICATIONS SUBMITTED OR IN PREPARATION

- 1. Jang D, Darling R, Choudhary G, <u>Jankowich M</u>. Hemorrhagic complications of transthoracic needle biopsy of the lung in patients with pulmonary hypertension: a systematic review and meta-analysis. Submitted for publication.
- 2. Imran T, Choudhary G, Terry JG, Min Y-I, <u>Jankowich M</u>. Relationship of the restrictive spirometry phenotype with aortic and left ventricular structure and function on magnetic resonance imaging: The Jackson Heart Study. In preparation.
- 3. Chung HE, Ramani M, Ghosalkar DS, Chu AJ, Christensen JL, Heath JR, Ho T, Butler CA, Cherala R, <u>Jankowich MD</u>, Rounds S, Wu W-C, Choudhary G, Morrison AR. Pulmonary artery to aorta diameter ratio derived from lung cancer screening CT is associated with COPD and pneumonia hospitalizations. Submitted for publication.
- 4. Vijayakumar S, Louis DW, Corneau E, Erqou S, Waldo SW, Plomondon ME, Gokhale M, Sheikh W, Has P, Saad M, Abbott JD, Jankowich M, Aronow HD, Wu WC, Choudhary G. Effect of pulmonary hypertension on COVID-19 related outcomes in inpatient and ambulatory care settings. In preparation.

ABSTRACTS

- Harter RL, Kelly WB, Kramer MG, Kelly CR, Jankowich MD, Dzwonczyk RR, Nagaraja HN. "Obese Diabetic Patients Have Increased Volume, Decreased pH Gastric Contents Compared to Obese Non-Diabetic Patients." Abstract, *Anesthesiology* 1997 87(3A): A1023 and poster discussion at 1997 American Society of Anesthesiology Conference (discussant RLH).
- Jankowich M, Lu Q, Newton J, Harrington EO, Rounds S. "Isoprenylcysteine-O-Carboxyl Methyltransferase (ICMT) Inhibition Alters Cell Stress Response Elements, Including Components of the Unfolded Protein Response." Poster presentation, Pulmonary Vascular Cell Signaling thematic poster session, ATS May 2006; and Brown Medicine Research Forum June 2006. Published as abstract *Proc Am Thorac Soc* 2006 (3): A685.
- Jankowich Matthew D. and Dushay, Kevin. "Paclitaxel pneumonitis: diagnosis by transbronchial lung biopsy." Oral presentation, Drug Reactions; CHEST 2006. Published as abstract *Chest* 2006; 130(4) Supplement: 338S.
- 4. Rounds S., Lu Q., Harrington E., and <u>Jankowich M</u>. "Carboxyl Methylation and Endothelial Unfolded Protein Response." Poster presentation, 2006 APS Conference on the Physiological Genomics and Proteomics of Lung Disease.

- Casserly B* and <u>Jankowich M</u>. "An unusual cause of spontaneous recurrent pneumothoraces." Fellows Case Symposium, ATS 2007 International Conference.
 *Fellow, Pulmonary and Critical Care Medicine
- Lu, Q., Jankowich M., Newton, J., Harrington, E.O., and Rounds, S. "Inhibition of small GTPase post-translational processing promoted endothelial cell apoptosis through alterations of ER chaperones." Poster presentation, Spring 2008 Cold Spring Harbor Laboratory Meeting on Molecular Chaperones and Stress Responses.
- Jankowich M, Lu Q, Newton J, Harrington EO, Rounds S. "Inhibition of Prenylation Alters Endoplasmic Reticulum Chaperones during Endothelial Cell Apoptosis." Poster Discussion session, Endothelial Signaling in Lung Injury and Pulmonary Edema, ATS May 2008; and Brown Medicine Research Forum June 2008. Published as abstract *Am J Respir Crit Care Med* 2008; 177: A847.
- Jankowich M and Rounds S. "Combined Pulmonary Fibrosis and Emphysema (CPFE) Is Common in Hospitalized Veterans with Pulmonary Fibrosis (PF) and Results in a Unique Clinical Phenotype." Poster presentation, Clinical Aspects of ILD thematic poster session, ATS 2009 International Conference and Brown Medicine Research Forum June 2009. Published as abstract *Am J Respir Crit Care Med* 2009; 179: A2986.
- Taveira T, Jankowich M, Wu W-C. "Hemoglobin A1C Vs. Oral Glucose Tolerance Test For Diabetes Diagnosis in NHANES 1988-1994 And 2005-2006." Poster presentation, American Heart Association Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke 2010 Scientific Sessions and Brown Medicine Research Forum 2010.
- Jankowich M.D., Taveira T., Wu W.-C.. "Decreased lung function is associated with increased central arterial stiffness: data from NHANES III." Poster discussion, "Novel Insights Into Lung Mechanics In Health And Disease", ATS 2010 International Conference and Brown Medicine Research Forum 2010. Published as abstract *Am J Respir Crit Care Med* 2010; 181: A1250.
- Gartman E.*, Jankowich M.D.. "An unrecognized cause of hemoptysis in cryoglobulinemia." Poster discussion, "Case Reports: Unusual Manifestations of Sarcoid and Other Systemic Diseases." ATS 2010 International Conference. Published as abstract *Am J Respir Crit Care Med* 2010; 181: A6669.

*Fellow, Pulmonary and Critical Care Medicine, Brown University

- Jankowich M.D., Taveira T, Wu W-C. "Cardiovascular Risk Factors in Individuals with Impaired Lung Function: Data from NHANES III." Oral Presentation, Session 6096, "COPD Miscellaneous", CHEST 2010. Published as abstract *Chest* 2010 138: 710A. Presented as poster, Brown Medicine Research Forum 2011.
- Lubinsky A.S.*, <u>Jankowich M.</u>, Borgia M., Nici L., Pirraglia P.. "Pulse Pressure Does Not Correlate with Exercise Tolerance in Patients with COPD Undergoing Pulmonary Rehabilitation." Poster presentation, session A63: "Assessment of COPD in the Context of Pulmonary Rehabilitation", ATS 2011 International Conference and Brown Medicine Research Forum 2011. Published as abstract *Am J Respir Crit Care Med* 2011; 183: A2027. *Fellow, Pulmonary and Critical Care Medicine, Brown University
- 14. Jankowich M., Choudhary G., Klinger J.R., Wu W.-C.. "Relationship Between Lung Function And Albuminuria: Data From The Third National Health And Nutrition Examination Survey

(NHANES III)." Poster presentation, session D59: "COPD Epidemiology: Risk Factors, Trends, Comorbidities", ATS 2012 International Conference and Brown Medicine Research Forum 2012. Published as abstract *Am J Respir Crit Care Med* 2012; 185: A6042.

- 15. Steiner J.*, Jankowich M., Wu W.-C., Maron B.A., Gaddam S., Choudhary G.. "Echocardiography-Based Pulmonary Hypertension Phenotypes." Poster presentation, session C65: "Assessment of Pulmonary Hypertension", ATS 2013 International Conference. Published as abstract *Am J Respir Crit Care Med* 2013; 187: A4694.
 *Fellow, General Cardiology, Brown University
- Steiner J*, Jankowich M, Wu W-C, Maron BA, Choudhary G. "Right ventricular function predicts mortality in complex co-morbid pulmonary hypertension." Poster presentation, 2013 Grover Conference.

*Fellow, General Cardiology, Brown University

 Evans S.K.*, Choudhary G., Taveira T, Tucker T., Wu W.C., <u>Jankowich M.</u>. "Predictors Of Six-Minute Walk Distance In Veterans With Type 2 Diabetes Mellitus". Poster presentation, session B66: "Novel and Traditional Lung Function Assessment", ATS 2014 International Conference and Brown Medicine Research Forum 2014. Published as abstract *Am J Respir Crit Care Med* 2014; 189: A3561.

*Fellow, Pulmonary and Critical Care Medicine, Brown University

- Steiner J*, Wu W., <u>Jankowich M.</u>, Maron B., Sharma S., Choudhary G.. "Echocardiographic Predictors of Mortality in Patients with Pulmonary Hypertension and Cardiopulmonary Comorbidities". Poster presentation, Brown Medicine Research Forum 2014. *Fellow, General Cardiology, Brown University
- Slomka T.*, Choudhary G., Jankowich M.. "Multidisciplinary PH Clinic—New Healthcare Delivery Model in VAMC". Poster presentation, Brown Medicine Research Forum 2014. *Fellow, Preventive Cardiology, Brown University
- A. Leung*, H. Ganga*, A. Saeed, <u>M. Jankowich</u>, G. Choudhary. "The Relationship Between Pulmonary Diastolic Pressure Gradient and Pulmonary Artery Pulse Pressure in Pulmonary Hypertension". Poster discussion, session B108: "Beyond WHO Group I Pulmonary Hypertension", ATS 2015 International Conference. Published as abstract, *Am J Respir Crit Care Med* 2015; 191: A3828.

*Fellows, Preventive Cardiology, Brown University

- M. Jankowich, W.-C. Wu, G. Choudhary. "Elevated Plasma Endothelin-1 Level is Associated with Pulmonary Hypertension and Mortality in African-Americans: The Jackson Heart Study". Poster presentation, session C59: "Biomarkers and Prognostic Factors in Pulmonary Hypertension", ATS 2015 International Conference. Published as abstract, *Am J Respir Crit Care Med* 2015; 191: A4823.
- A. Foderaro*, <u>M. Jankowich</u>. "Sun Damage or Lung Damage: Heliocare (Polypodium Leucotomas)-Induced Eosinophilic Pneumonitis." Poster presentation, session A46: "Lung Disease due to OTC and Illicits: Case Reports", ATS 2016 International Conference, Sunday 5/15/2016, San Francisco, CA.

*Fellow, Pulmonary and Critical Care Medicine, Brown University

- 23. S. M. Iosifescu*, T. Amass**, <u>M. Jankowich</u>. "Salmonella Vertebral Osteomyelitis Presenting as a Loculated Exudative Pleural Effusion." Poster presentation, session B38: "Pleural Disease: Case Reports". ATS 2016 International Conference, Monday, 5/16/2016, San Francisco, CA.
 *Medical student (MSIV), Alpert Medical School of Brown Unversity
 **Fellow, Pulmonary and Critical Care Medicine, Brown University
- 24. <u>M. Jankowich</u>, W. Wu, C. Blackshear, W. Wang, M. Godfrey*, S. Abbasi, G. Choudhary. "The Restrictive Spirometry Pattern, Cardiac Structure, and Incident Heart Failure Risk: The Jackson Heart Study." Poster presentation, session C55: "Cardiopulmonary Effects of Air Pollution." ATS 2016 International Conference, Tuesday, 5/17/2016, San Francisco, CA. *Resident, Internal Medicine, Brown University
- M. Jankowich, R. Hebel, J. Jantz*, G. Choudhary. "Multispecialty Pulmonary Hypertension Clinic in the VA: Patient Assessment, Management and Outcomes." Brown Medicine Research Forum 6/27/2016.

*Preventive Cardiology Fellow, Brown University

- 26. M. Bates, <u>M.D. Jankowich</u>, S.I. Rounds, B.A. Kimble, T.T. Ng, L.L. Nici, I.C. Okereke. "Effects of Implementation of Lung Cancer Screening at a Veterans Affairs Medical Center." Presented at the American College of Surgeons Clinical Congress 2016, Scientific Forum 13, Thoracic Surgery, presenter MB, 10/18/16. Published as abstract, *Journal of the American College of Surgeons* 2016; 223(4), Supplement 1, Page S22.
- M. Jankowich, S. Evans, E. Elston, W.-C. Wu, G. Choudhary. "Relationship of Iron Deficiency and Serum Ferritin Levels with Pulmonary Hypertension: The Jackson Heart Study." *Chest* 2016; 150(4), Supplement: Page 1150A.
- 28. <u>M. Jankowich</u>, B. Elston, S. Abbasi, A. Maan, C. Blackshear, K. Dabhadakar, W.-C. Wu, G. Choudhary. "The association of adiponectin and pulmonary hypertension in African-Americans: The Jackson Heart Study." Moderated poster presentation: Clinical—Biomarker session, 11th PVRI Annual World Congress on Pulmonary Vascular Disease, Saturday, January 28th, 2017, Miami, Florida and Brown Medicine Research Forum 6/28/2017. Abstract published in *Pulmonary Circulation* 2017;7(4): 1-32.
- M. Jankowich, R. Hebel, J. Jantz, S. Abbasi, G. Choudhary. "Pulmonary Hypertension in Veterans Has a High One-Year Mortality and the REVEAL Equation Overestimates Survival in this Patient Population." Poster presentation, session B72: "Others Here With Us: Clinical Features of Pulmonary Vascular Disease I." ATS 2017 International Conference, Monday, 5/22/17, Washington, D.C..
- 30. S. Abbasi, R. Hebel, A. Vang, W.-C. Wu, <u>M. Jankowich</u>, G. Choudhary. "Pulmonary Artery Stiffness Is Associated with Right Ventricular Fibrosis on Magnetic Resonance Imaging in Veterans with Pulmonary Hypertension." Poster Discussion session C27, "Let's Pretend We're Married: The Right Ventricle and the Pulmonary Vasculature". ATS 2017 International Conference, Tuesday, 5/23/17, Washington, D.C. and Brown Medicine Research Forum 6/28/2017.
- 31. J. V. Baptiste*, <u>M. Jankowich</u>, L.L. Nici. "Lung Cancer Screening with Low Dose CT: Two Year Experience at Providence Veteran Affairs Medical Center." Rapid Abstract Poster Discussion session C30, "Lung Cancer Screening: Who, Why, Where, and How Much". ATS 2017 International Conference, Tuesday, 5/23/17, Washington, D.C..

*Fellow, Pulmonary and Critical Care Medicine, Brown University

- Marjan Mujib*, Rayan Yousefzai, <u>Matthew Jankowich</u>, Nishant Shah, Alan Morrison, Sartaj Gill, Wen-Chih Wu, Gaurav Choudhary. "Diastolic Pressure Gradient in Risk Stratifying Pre-Heart Transplant Pulmonary Hypertension." American Heart Association Scientific Sessions 2017, Abstract Poster Session HF.APS.01, session title "VAD and Transplant", Sunday, November 12th, 2017, Anaheim, CA. Published as abstract in *Circulation* 2017; 136:A18035. *Fellow, General Cardiology, Brown University
- 33. S. Lakshmanan, <u>M.D. Jankowich</u>, W. Wu, C. Blackshear, S. Abbasi, G. Choudhary. "Gender Differences in Risk Factors Associated with Pulmonary Artery Systolic Pressure in the Jackson Heart Study." Session A64 – "Let's Go Trippin': Diagnostics and Risk Assessment in Pulmonary Hypertension". ATS 2018 International Conference, Sunday, 5/20/2018, San Diego, CA. Published as abstract in *Am J Respir Crit Care Med* 2018; 197:A2136.
- 34. E.J. Gartman, <u>M.D. Jankowich</u>, J. Baptiste, L. Nici. "Providence VA Lung Cancer Screening Program: Performance: Comparison of Local False Positive and Invasive Procedure Rates to Published Trial Data." Session A98 – "Clinical Strategies to Improve Lung Cancer Early Detection: Who Is At Risk Here?" ATS 2018 International Conference, Sunday, 5/20/18, San Diego, CA. Published as abstract in *Am J Respir Crit Care Med* 2018; 197: A2477.
- 35. <u>M.D. Jankowich</u>, E.J. Gartman, J. Baptiste, L. Nici. "Histology and Staging of Lung Cancer in Veterans Who Underwent Baseline Low-Dose CT Screening: Data from the Providence VA Medical Center". Session B110 – "Lung Cancer Screening and Pulmonary Nodules: Refinements and Redefinements". ATS 2018 International Conference, Monday 5/21/18, San Diego, CA. Published as abstract in *Am J Respir Crit Care Med* 2018; 197: A4416.
- 36. M. Nayeemuddin*, <u>M.D. Jankowich</u>, A. Noska, E.J. Gartman. "A Strange Case of Coccidiomycosis: Utilization of Bronchoscopy to Diagnose a Chronic Cavitary Lesion." Session C58 "Fungal Case Reports". ATS 2018 International Conference, Tuesday, 5/22/18, San Diego, CA. Published as abstract in *Am J Respir Crit Care Med* 2018; 197: A5427.
 *Fellow, Pulmonary and Critical Care Medicine, Brown University
- 37. B. Roussel*, V. Carter, C. Ekekezie**, E. Argueta*, C.R. Kelly, <u>M.D. Jankowich</u>. Hemophagocytic Lymphohistiocytosis in a Patient With Crohn's Disease. "IBD Clinical Vignettes/Case Reports" Session, P1404, poster presentation, American College of Gastroenterology annual meeting. Monday, October 8th, 2018, Philadelphia, PA.
 *Residents, Internal Medicine
 **Chief resident, Internal Medicine
- 38. A. Schiff*, S. Greene**, E.J. Gartman, <u>M.D. Jankowich</u>, L. Nici. Correlation of a Co-Morbidity Index with Time-To-Death from Baseline Lung Cancer Screening Computed Tomography in a Veteran Population. Session C30 – "Lung Cancer Screening: Lessons from the Front-Line". ATS 2019 International Conference, Tuesday, May 21st, 2019, Dallas, TX. *Fellow, Pulmonary and Critical Care Medicine, Brown University **Resident, Internal Medicine, Brown University
- M.D. Jankowich, D.A. Johnson, J.G. Wilson, M. Mittleman, M. Sims, S.S. Redline, and G. Choudhary. Relationship of Sleep Symptoms and Objective Measurements of Obstructive Sleep Apnea to Pulmonary Artery Systolic Pressure in African-Americans: The Jackson Heart Study.

B53 Acute Lung Injury, ARDS, Sleep, and Beyond: Clinical Studies and Case Reports/Thematic Poster Session. *Am J Respir Crit Care Medicine* 2020; 201: A3747.

- 40. J. Ferguson*, <u>M.D. Jankowich</u>, L. Nici, J. Melek, E.J. Gartman. Barriers to Lung Cancer Screening in a Veteran Population: Does Distance Drive Completion? D30 "Lung Cancer Screening: Real World Evidence"/RAPiD: Rapid Abstract Poster Discussion Session. *Am J Respir Crit Care Medicine* 2020; 201: A6456. *Fellow, Pulmonary and Critical Care Medicine, Brown University
- 41. Fatima Zeba*, Yanning Wu, Juraj Melek, Fenghai Duan, Michael Atalay, <u>Matthew Jankowich</u> and Sharon Rounds. Clinical significance of radiological markers of pulmonary hypertension in combined pulmonary fibrosis and emphysema. In "Updates in Diffuse and Orphan Lung Disease", CHEST Annual Meeting 2020, presented 10/19/20 by F.Z.. Published in *Chest* 2020; 158(4), Supplement, A1042.

*Resident, Kent Hospital Internal Medicine, Brown University

- 42. Y. Vayntrub*, E. Gartman, L. Nici, <u>M.D. Jankowich</u>. Diagnostic performance of the Herder Malignancy Risk Prediction Model in Veterans Undergoing Positron Emission Tomography (PET) Scans for Pulmonary Nodule Evaluation. Session TP136 – TP 136 "Thoracic Oncology: Lung Cancer Screening/Nodule Management". ATS International Conference 2021. Published online in *Am J Respir Crit Care Medicine* 2021, Volume 203, May 3rd abstract issue. *Fellow, Pulmonary and Critical Care Medicine, Brown University
- 43. W. Branch-Elliman, R. Ferguson, G. Doros, P. Woods, S. Leatherman, J. Strymish, R. Datta, R. Goswami, <u>M.D. Jankowich</u>, N.R. Shah, T.H. Taylor, S.T. Page, S.J. Schiller, C. Shannon, C. Hau, M. Flynn, E. Holmberg, K. Visnaw, R. Dhond, M. Brophy, P.A. Monach. Subcutaneous sarilumab for the treatment of hospitalized patients with moderate to severe COVID19 Disease: a pragmatic, embedded randomized clinical trial. Poster Session Z4. COVID-19 treatment. IDWeek 2021. Presented by W. Branch-Elliman, Wednesday, Sept. 29th, 2021.
- 44. Tasnim F. Imran, Thomas Garrett, Laura Parra, Daniel Arcuri, Christopher Nguyen, <u>Matthew</u> <u>Jankowich</u>, Reza Avazmohammadi, Michael Atalay, Wen-Chih H Wu, Gaurav Choudhary. Endothelin-1 and Procollagen type-1 carboxyterminal propetide are associated with functional tolerance and cardiac structure and function in heart failure with preserved ejection fraction. AHA Vascular Discovery 2023: From Genes to Medicine Scientific Sessions, Boston, MA. Poster presentation, Wednesday, May 10th, 2023. Presented by Tasnim Imran.
- 45. Daniel Jang*, Rachel Darling**, Gaurav Choudhary, <u>Matthew Jankowich</u>. Hemorrhagic complications of percutaneous CT-guided lung biopsy in patients with pulmonary hypertension: a systematic review and meta-analysis. Session A58 Visualizing the Future: Imaging in Pulmonary Hypertension. Thematic Poster Presentation, ATS International Conference 2023, Sunday May 21st, 2023. Published online in *Am J Respir Crit Care Med* 2023; 207: A1980 *Resident, Internal Medicine, Brown University

**Fellow, Pulmonary and Critical Care Medicine, Brown University

INVITED PRESENTATIONS

Local

1. Invited Speaker, topic: "Pulmonary preinvasive neoplasms". Brown Chest Conference, Brown University, Providence, RI, 4/11/2008.

- 2. Invited Speaker, "The Influence of Emphysema on the Clinical Phenotype of Veterans with Pulmonary Fibrosis." Brown Pulmonary Research Seminar, Brown University, 2/2009.
- 3. Invited Speaker, topic: "Aging and Lung Disease". Brown Chest Conference, Brown University, Providence, RI, 4/10/2009.
- 4. Invited Speaker, topic: "The Third Gas?". Brown Chest Conference, Brown University, Providence, RI, 10/23/2009.
- 5. Invited Speaker, topic: "Recent Clinical Trials in IPF". Brown Chest Conference, Brown University, 9/17/2010.
- 6. Invited Speaker, "Update in Internal Medicine: COPD". Clinical Updates in Internal Medicine Conference, Providence VA Medical Center, Providence, RI, 2/4/2011.
- 7. Invited Speaker, topic: "Progress in Targeted Lung Cancer Treatment". Brown Citywide Chest Conference Series, Brown University, Providence, RI, 9/9/2011.
- 8. Invited Speaker, "Update in Internal Medicine: Lung Cancer". Clinical Updates in Internal Medicine Conference, Providence VA Medical Center, Providence, RI, 1/6/2012.
- 9. Invited Speaker, topic: "Multiple Primary Lung Cancer". Brown Citywide Chest Conference Series, Brown University, Providence, RI, 9/28/2012.
- 10. Invited Speaker, topic: "The Base of the Iceberg: A Portrait of Pulmonary Hypertension in the Community". Brown Citywide Chest Conference Series, 12/13/2013.
- Invited Speaker (along w/Gaurav Choudhary, M.D.), "Update in Internal Medicine: Pulmonary Hypertension". Clinical Updates in Internal Medicine Conference, Providence VA Medical Center, Providence, RI 1/4/2013.
- 12. Invited Speaker, "The Base of the Iceberg: A Portrait of Pulmonary Hypertension in the Community." Cardiology Grand Rounds, Rhode Island Hospital, Providence, RI 2/28/2014.
- 13. Invited Speaker, topic: "Looking into the PRISm: Characteristics and Outcomes of the Restrictive Spirometry Phenotype". Brown Citywide Chest Conference, Providence, RI, 12/19/2014.
- Speaker, topic: "Community-Acquired Pneumonia Update: Bringing the Diagnosis and Treatment of Pneumonia into the 21st Century". Brown Citywide Chest Conference, Brown University, Providence, RI, 10/30/2015.
- 15. Invited Speaker, "Small Lungs, Stiff Vessels, Bad Hearts? Adverse Cardiovascular Outcomes and the Restrictive Spirometry Pattern". Brown Pulmonary Research Conference, 11/14/2016.
- Invited Speaker, topic: "Malignant Pleural Effusions Update on Natural History and Management of a Common Clinical Problem". Brown Citywide Chest Conference, Brown University, Providence, RI 12/2/2016.
- 17. Invited Speaker, topic: "Eosinophils in COPD Key Biomarker, Yesterday's News, or Both?" Brown Citywide Chest Conference, Brown University, Providence, RI 11/3/2017.

- 18. Invited Speaker, topic: "'Heart of the Lungs' Revisited". Brown Citywide Chest Conference, Brown University, Providence, RI, 11/2/2018.
- 19. Invited Speaker, topic: "Myeloproliferative Disorders and Pulmonary Hypertension". Brown Citywide Chest Conference, Brown University, Providence, RI, 9/6/2019.
- 20. Invited Speaker, topic: "Lung Cancer Screening Update". Brown Citywide Chest Conference, Brown University, Providence, RI, 5/29/2020.
- 21. Invited Speaker, topic: "Adult Pulmonary Outcomes of Premature Birth". Brown Citywide Chest Conference, Brown University, Providence, RI, 9/18/2020.
- 22. Invited Speaker, topic: "Combined Pulmonary Fibrosis and Emphysema 2021". Brown Citywide Chest Conference, Brown University, Providence, RI, 10/8/2021.
- 23. Invited Speaker, topic: "Immersion Pulmonary Edema". Brown Citywide Chest Conference, Brown University, Providence, RI, 9/16/2022.
- Invited Speaker, topic: "Preventing COPD Exacerbations From Minimal Options to Complicated Choices?". Brown Citywide Chest Conference, Brown University, Providence RI, 9/22/2023.

Regional

- 1. Invited Speaker, "Concepts in Pulmonary Rehabilitation". "The Changing Face of COPD: From Bedside to the Community". Providence, RI, 4/20/2011. R13 conference grant, conference organizer: Donna Parker, Sc.D., Memorial Hospital of Rhode Island.
- Invited Speaker, "Combined Pulmonary Fibrosis and Emphysema Syndrome". 3rd Annual Yale COPD Symposium: The Many Faces of COPD. Yale School of Medicine, New Haven, CT, 4/4/2014. Conference organizer: Carolyn L. Rochester, M.D., Yale University.
- Conference Organizer, Rhode Island Thoracic Society Annual Meeting 2015. "The Management of Idiopathic Pulmonary Fibrosis/Usual Interstitial Pneumonia: Where Are We Today?" Keynote speaker: Talmadge E. King, Jr., MD. Warren Alpert Medical School of Brown University, 3/16/2015.

National/International

- Session facilitator, "Diagnostic Techniques and Monitoring: From Bench to Bedside." Thematic poster session: C45, American Thoracic Society International Conference ATS 2010, New Orleans, LA, 5/2010.
- 2. Invited Speaker, "Cardiovascular Risk Factors in Individuals with Impaired Lung Function: Data from NHANES III." Oral presentation, American College of Chest Physicians conference CHEST 2010, Vancouver, Canada, 10/31/2010.
- 3. Invited Moderator, "New Outlooks in COPD", slide session, Session 6078, American College of Chest Physicians conference, CHEST 2010, Vancouver, Canada, 11/2/2010.

- 4. Invited Moderator, "DVT/PE/Pulmonary Hypertension IV", Poster session, American College of Chest Physicians conference, CHEST 2014, Austin, TX, 10/29/2014.
- 5. Invited Moderator, "Hot Topics in PAH", Slide session, American College of Chest Physicians conference, CHEST 2015, Montreal, Canada, 10/28/2015.
- Invited Speaker, "Relationship of Iron Deficiency and Serum Ferritin Levels With Pulmonary Hypertension: The Jackson Heart Study", "PAH" session, CHEST 2016, Los Angeles, CA, 10/23/2016.
- Invited Speaker, "Lung cancer screening initiatives in the Veterans Affairs environment— Providence", 37th International Conference on Screening for Lung Cancer, International Early Lung Cancer Action Project, Swedish Cancer Institute and Medical Center, Seattle, WA, 9/15/2017.
- 8. Invited Moderator, "Pulmonary Vascular Disease 1", Poster session, American College of Chest Physicians conference, CHEST 2018, San Antonio, TX, 10/9/2018.
- 9. Invited Moderator, "Pulmonary Vascular Disease 1", Poster session, American College of Chest Physicians conference, CHEST 2019, New Orleans, LA, 10/21/2019.
- 10. Invited Moderator, "Diffuse Lung Disease 2", Poster session, American College of Chest Physicians conference, CHEST 2019, New Orleans, LA, 10/23/2019.
- Invited Moderator, "PAH Abstract Posters 1", Original investigation poster/recorded video session, American College of Chest Physicians conference, CHEST 2021, 10/19/2021-10/20/2021.
- Invited Speaker, "Clinical Utility of Cardiopulmonary Exercise Testing: A Case-Based Session", Specialty Registrar Training Session, Irish Thoracic Society Annual Scientific Meeting 2023, Limerick, Ireland, Thursday 11/9/2023.

GRANT SUPPORT

2009-2013	Member, Data Safety and Monitoring Board, Grant R18 HL 093090 "Translating COPD Guidelines into Primary Care Practice (The Lung Age Study)".
2010-2011	PI. "The effect of pulmonary rehabilitation on systemic vascular function in COPD." Department of Medicine Chairman's Developmental Research Grant: \$25,000/year x 1 year
2012-2013	PI. "Effect of Cardiovascular Risk Reduction on Systemic Vascular Function in Diabetics with COPD". Grant number 20113648, The Rhode Island Foundation: \$13,790 x 1 year.
2012-2014	Site investigator, CSP#574 "Extended Steroid in CAP(e) (ESCAPe): A Randomized, Placebo-Controlled, Double-Blind Clinical Trial to Evaluate the Safety and Efficacy of Methylprednisolone in Hospitalized Veterans with Severe Community-Acquired Pneumonia". VA Cooperative Study. Local site budgetary support: \$24,514 (in 2012); \$58,930 (2013). Study completed; results were published in Intensive Care Medicine in 2022.

2014-2019	Site Co-Investigator, Tadalafil for Pulmonary Hypertension Associated with Chronic Lung Disease (TADA-PHiLD) study. (Co-PIs: Ron Goldstein, Boston VA Medical Center, Sharon Rounds, Providence VA Medical Center) This was a pivotal multicenter VA clinical trial evaluating the effect of phosphodiesterase-5 inhibition versus placebo for the treatment of pulmonary hypertension related to COPD (COPD-PH). The Pulmonary Hypertension clinic at the Providence VA served an important role in subject recruitment and evaluation. Study completed and study manuscript published in Pulmonary Circulation in 2022.
2016-2018	Site Investigator, "Oxygen versus PAP for Treatment of Sleep Apnea in Chronic Heart Failure (OPTIMAL-HF) study". (PI: Daniel J. Gottlieb, MD, MPH). VA Merit Review CLIN-008-12S. Local site budgetary support: \$40,000 (2017), \$6,700 (2018).
2020-2021	Site Co-Principal Investigator, "Sarilumab for Patients with Moderate COVID-19 Disease: A Randomized Controlled Trial with a Play-The-Winner Design". Funding mechanism pending. Industry support: None. ClinicalTrials.gov number: NCT04359901. Local site PI: Nishant Shah. Principal Investigator: Westyn Branch- Elliman. Study completed; study results published in PLoS One in 2022.
2021-2022	Site Principal Investigator, Therapeutics for Inpatients with COVID-19 (TICO)/ACTIV-3 (INSIGHT 014). Funding: INSIGHT subaward #204-014-074025- P5. NCT04501978. Sponsor: University of Minnesota. Principal Investigator: Prof. Jens Lundgren. Local site budgetary support: \$12,180. Study completed; enrollment ended.
2022	Site Co-investigator, Evaluation of the Feasibility and Reproducibility of 2 Point-of- Care Tests for SARS-CoV-2 Antibodies (EPOC)—INSIGHT-017. Funding: Funded by the National Institute of Allergy and Infectious Disease (NIAID), National Institutes of Health, and carried out by the International Network of Strategic Initiatives in Global HIV Trials (INSIGHT) and University of Minnesota. Site PI: Anupama Menon. Local site budgetary support: \$5654. Study completed; enrollment ended. Manuscript in preparation.
2023-	Site Principal Investigator, Effect of PDE5 Inhibitor on Respiratory Symptoms in COPD Complicated by Pulmonary Hypertension or (Breathe Easier with Tadalafil Therapy for Exercise Related dyspnea in COPD-PH, "BETTER COPD-PH"). Funded by VA Office of Research and Development Clinical Science R+D grant (PI: Sharon Rounds).

UNIVERSITY TEACHING ROLES

2007	Small group leader, BIOL 3660: Integrated Medical Sciences (IMS) III: Pulmonary. Seven sessions, 8 students in group.
2007	Lecturer, BIOL 3660: IMS III: Pulmonary. One lecture, 97 students in class.
2007	Small group leader, Supporting Structures, BIO 350 Integrative Pathophysiology/Pharmacology, 2 sessions.

2008	Associate course director, BIOL 3663 IMS III: Pulmonary.
2008	Lecturer, BIOL 3663 IMS III: Pulmonary. Four lectures, 97 students in class.
2008	Small group leader, BIOL 3663 IMS III: Pulmonary. Seven sessions, 8 students in group.
2009	Course director, BIOL 3663 IMS III: Pulmonary.
2009	Lecturer, BIOL 3663 IMS III: Pulmonary. Five lectures, 1 problem session, 1 review session, 97 students in class.
2009	Small group leader, BIOL 3663 IMS III: Pulmonary. Six sessions, 8 students in group.
2009-2017	Curriculum Development, BIOL 3663 IMS III: Pulmonary: 10 lectures and organized problem sessions, 2 organized review sessions, individual sample questions and problem sets, 1 pulmonary physiology guidebook for course.
2010	Course director, BIOL 3662 IMS III: Pulmonary.
2010	Lecturer, BIOL 3662 IMS III: Pulmonary. Five lectures, 1 problem session, 1 review session, 97 students in class.
2010	Small group leader, BIOL 3662 IMS III: Pulmonary. Five sessions, 8 students in group.
2011	Course leader, IM-3310: Pulmonary Diseases clinical elective. On average, 1 student every 2-4 months.
2011	Course director, BIOL 3662 IMS III: Pulmonary.
2011	Lecturer, BIOL 3662 IMS III: Pulmonary. Four 80-minute lectures, 1 problem session, 2 organized review sessions, 97 students in class.
2011	Small group leader, BIOL 3662 IMS III: Pulmonary. Six sessions, 9 students in group.
2012	Course director, BIOL 3663 IMS III: Pulmonary.
2012	Lecturer, BIOL 3663 IMS III: Pulmonary. Three 80-minute lectures, 3 50-minute lectures, 3 organized review sessions, 106 students in class.
2012	Small group leader, BIOL 3663 IMS III: Pulmonary. Six sessions, 9 students in group.
2013	Course director, BIOL 3663 IMS III: Pulmonary.
2013	Lecturer, BIOL 3663 IMS III: Pulmonary. Four 80-minute lectures, one 50-minute lecture, one 30-minute lecture, two organized review sessions, 111 students in class.

2013	Small group leader, BIOL 3663 IMS III: Pulmonary. Six sessions, 10 students in group.
2014	Course director, BIOL 3663 IMS III: Pulmonary.
2014	Lecturer, BIOL 3663 IMS III: Pulmonary. Five 50-minute lectures, two 80-minute lectures, 3 recorded presentations, one organized review session, 118 students in class.
2014	Small group leader, BIOL 3663 IMS III: Pulmonary. Five sessions, 8 students in group.
2015	Course director, BIOL 3663 IMS III: Pulmonary.
2015	Lecturer, BIOL 3663 IMS III: Pulmonary. Three 80-minute lectures, three 50-minute lectures, 4 recorded presentations, one organized review session, 122 students in class.
2015	Small group leader, BIOL 3663 IMS III: Pulmonary. Five sessions, 10 students in group.
2016	Course director, BIOL 3663 IMS III: Pulmonary
2016	Lecturer, BIOL 3663 IMS III: Pulmonary. Three 80-minute lectures, three 50-minute lectures, 3 recorded presentations, one organized review session, 144 students in class.
2016	Small group leader, BIOL 3663 IMS III: Pulmonary. Six sessions, 12 students in group.
2016	Ultrasound training sessions, BIOL 3663 IMS III: Pulmonary. Three 60-90 minute sessions, 8-12 students per session in divided groups.
2017	Faculty participant, IM-3205: Winter School in Critical Care, Fundamental Critical Care Support program of the Society of Critical Care Medicine, at University of Tübingen, Germany. Two-week course with didactic, problem-based learning, hands- on, and simulation sessions. Fifteen student participants from University of Tübingen, Brown University, and Kyoto University. See "State-of-the-Art Lessons in a Medieval Town", by Sean Love MD '17. Brown Medicine magazine, Spring 2017; <u>http://www.brownmedicinemagazine.org/blog/state-of-the-art-lessons-in-a-medieval-town/</u> .
2017	Course director, BIOL 3663 IMS III: Pulmonary
2017	Lecturer, BIOL 3663 IMS III: Pulmonary: Two 80-minute lectures, three 50-minute lectures, one organized review session, one clinical-pathological correlation conference, 145 students in class.
2017	Small group leader, BIOL 3663 IMS III: Pulmonary. Six sessions, 12 students in group.
2018	Course director, BIOL 3663 IMS III: Pulmonary

2018	Lecturer, BIOL 3663 IMS III: Pulmonary: Two 80-minute lectures, two 50-minute lectures, one organized review session, one clinical-pathological correlation conference, 145 students in class.
2018	Small group leader, BIOL 3663 IMS III: Pulmonary. Six sessions, 12 students in group.
2019	Course co-director, BIOL 3663 IMS III: Pulmonary
2019	Lecturer, BIOL 3663 IMS III: Pulmonary: Two 80-minute lectures, two 50-minute lectures, one organized review session, one clinical-pathological correlation conference, 145 students in class
2019	Small group leader, BIOL 3663 IMS III: Pulmonary. Six sessions, 9 students in group.
2020	Teacher, Internship Prep Course, Management of Pulmonary Disease. One 3-hour in- person session
2020	Lecturer, BIOL 3663 IMS III: Pulmonary: One 50-minute lecture, one 80-minute lecture, 145 students in class
2020	Small group leader, in-person small group, BIOL 3663 IMS III: Pulmonary. Six sessions, 6 students in group.
2021	Teacher, Internship Prep Course, Management of Pulmonary Disease. One 3-hour in- person session
2021	Lecturer, BIOL 3663 IMS III: Pulmonary: One 50-minute lecture, one 80-minute lecture, 145 students in class
2021	Small group leader, in-person small group, BIOL 3663 IMS III: Pulmonary. Six sessions, 10 students in group
2022	Teacher, Internship Prep Course, Management of Pulmonary Disease. One 3-hour in- person session
2022	Small group leader, in-person small group, BIOL 3663 IMS III: Pulmonary. Three sessions, 12 students in group.
2023	Lecturer, BIOL 3663 IMS III: Pulmonary: One 50-minute lecture, 145 students in class

HOSPITAL TEACHING ROLES

 ICU and Pulmonary Consult Service Attending for Medical Students, Internal Medicine Residents, and Pulmonary Fellows.
 On average, 3-4 months per year, 4 fellows per year, 1-2 residents per year on elective rotation, contact with 20-24 residents and students/year on ICU service.

2007-	Pulmonary mentor for clinical Pulmonary Fellows. Includes: instruction in vascular and pleural ultrasonography, chest tube placement and management, 2007-; instruction in endobronchial ultrasonography, 2010 On average, 1 fellow for 3 months per year
2007-	Lecturer, Internal Medicine Resident Noon Conference Sessions On average 3-4 sessions per year.
2010, 2013, 2019	Research mentor for Pulmonary Research Fellow. 1 fellow for 1 year.
2012-2023	Pulmonary Hypertension clinical mentor for VA/Brown Preventive Cardiology Fellows 1 fellow per year

GRADUATE MENTEES

2010-2011	 Anthony Steven Lubinsky, M.D. Project: "The effect of pulmonary rehabilitation on systemic vascular function in COPD." <u>Current position</u>: Staff pulmonary and critical care physician, Co-Director, Adult ECMO, Medical Director, Respiratory Care, NYU Langone Medical Center; Clinical Associate Professor of Medicine, Department of Medicine, New York University School of Medicine. <u>Role</u>:
	Served as research mentor for Dr. Lubinsky This project resulted in an abstract presented at ATS 2011 International Conference.
2013-2014	 Samuel K. Evans, M.D. Project: "Effect of cardiovascular risk reduction clinic on cardiac risk factors and systemic vascular function in diabetic veterans with chronic obstructive pulmonary disease." <u>Current position</u>: Attending pulmonologist, Sturdy Memorial Hospital, Attleboro, MA; Assistant Professor of Medicine (Clinical), Brown University. <u>Role</u>: Served as research mentor for Dr. Evans. This project resulted in an abstract presented at <i>ATS 2014 International Conference</i>.
2014-2015	 Mark Godfrey, M.D. Project: "Epidemiology of the Restrictive Spirometry Pattern and Relationship to Cardiac Structure and Function in African-Americans." <u>Current position</u>: Pulmonary physician, Hartford Hospital and Hartford Healthcare Medical Group <u>Role</u>: Served as research mentor for Dr. Godfrey This project resulted in a review article published in <i>Chest</i>, an abstract that was presented at the <i>ATS 2016 International Conference</i>, and an original manuscript that has been published in the <i>Annals of the American Thoracic Society</i>.
2017-2018	Suvasini Lakshmanan, M.D. Project: "Gender differences in Risk Factors Associated with Pulmonary Artery Systolic Pressure, Heart Failure and Mortality in African-American Individuals: Jackson Heart Study and Association of Elevated Plasma

Adiponectin levels with Pulmonary Hypertension, Mortality and Heart Failure in African-Americans: Jackson Heart Study."

<u>Current position</u>: Fellow in Cardiovascular Disease, University of Iowa <u>Role:</u>

--Served as master's thesis reader for Dr. Lakshmanan, when candidate for Master of Science in Clinical and Translational Research Degree, Brown University School of Public Health. Her degree was awarded May 2018.

--This project resulted in an abstract presented at the ATS 2018 International Conference and manuscripts published in the Journal of the American Heart Association and Pulmonary Circulation.

2019-2021 Yevgeniy Vayntrub, M.D.

Project: "Diagnostic Performance of the Herder Malignancy Risk Prediction Model in Veterans Undergoing PET Scans for Pulmonary Nodule Evaluation." <u>Current position</u>: Pulmonary and Critical Care Physician, Pulmonary Consultants, PLLC, Tacoma, Washington.

Role:

--Served as research mentor for Dr. Vayntrub

--This project resulted in an abstract and video poster presentation for *ATS 2021* and a manuscript that was published in *Lung*.

2022-2023 Daniel H. Jang, M.D.

Project: "Hemorrhagic complications of transthoracic needle biopsy of the lung in patients with pulmonary hypertension: a systematic review of the literature and meta-analysis."

<u>Current position:</u> Hospitalist Medicine, St. Agnes Medical Center, Fresno, California. Pulmonary and Critical Care Fellow at Montefiore Medical Center, Albert Einstein College of Medicine beginning July 2024.

Role:

--Served as mentor for Dr. Jang for this academic project.

--This project resulted in an abstract and poster presentation at the *ATS 2023 International Conference*. A manuscript has been submitted for publication.