# Academic Accomplishments 2015

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#### JOURNAL ARTICLES

- 1. Brown AW, Fischer CP, Shlobin OA, Buhr RG, Ahmad S, Weir NA, Nathan SD. Outcomes after Hospitalization in Idiopathic Pulmonary Fibrosis: a cohort study. Chest 2015;147: 173 – 179
- Keyser RE, Woolstenhulme J, Chin L, Nathan SD, Connors G, Drinkard B Lamberti J, Chan L. Cardiorespiratory Function Before and After Aerobic Exercise Training in Patients with Interstitial Lung Disease. J Cardiopulm Rehabil Prev. 2015 Jan-Feb;35(1):47-55
- Keyser RE, Christensen EJ, Chin LMK, Woolstenhulme JG, Drinkard B, Quinn A, Connors G, Weir N, Nathan SD, Chan LE. Fatigability after Intense Aerobic Exercise Training Patients with Interstitial Lung Disease. Res Med 2015;109:517-525
- 4. Kirillov V, Siler JT, Ramadass M, Ge L, Grant G, Nathan SD, Jarai G, Trujillo G. Sustained Activation of Tolllike Receptor 9 Induces an Invasive Phenotype in Lung Fibroblasts. Possible Implications in Idiopathic Pulmonary Fibrosis. Am J Pathol. 2015 Apr;185(4):943-57. doi: 10.1016/j.ajpath.2014.12.011
- Lederer DJ, Bradford WZ, Fagan EA, Glaspole I, Glassberg MK, Glasscock KF, Kardatzke D, King TE, Lancaster L, Nathan SD, Pereira CA, Sahn SA, Swigris JJ, Noble PW. Sensitivity Analyses of the Change in Forced Vital Capacity in a Phase 3 Trial Evaluating Pirfenidone in Adults with Idiopathic Pulmonary Fibrosis. Chest. 2015;148:196-201
- Nathan SD, du Bois RM, Albera, C, Bradford WZ, Costabel U, Kartashov A, Noble PW, Sahn SA, Valeyre D, Weycker D, King TE. Validation of test performance characteristics and minimal clinically important difference of the 6-minute walk test in patients with idiopathic pulmonary fibrosis. Respir Med 2015;109:914-922
- Kim SY, Diggans J, Pankratz D, Huang J, Pagan M, Sindy N, Tom E, Anderson J, Choi Y, Lynch DA, Steele M, Flaherty KR, Brown KK, Farah H, Bukstein MJ, Pardo A, Selman M, Wolters P, Nathan SD, Colby TV, Myers JL, Katzenstein AA, Raghu G, Kennedy GC. Differentiating Interstitial Lung Diseases Using Machine Learning on High-Dimensional Transcriptional Data and Surgical Lung Biopsies. Lancet Respir Med. 2015;3:473-483 doi: 10.1016/S2213-2600(15)00140-X.
- Raghu G, Nathan SD, Behr J, Brown KK, Egan JJ, Kawut SM, Flaherty KR, Martinez FJ, Wells AU, Shao L, Zhang H, Henig N, Szwarcberg J, Gillies H, Montgomery AB, O'Riordan TG. Pulmonary hypertension in idiopathic pulmonary fibrosis with mild to moderate restriction. Eur Respir J 2015 46(5):1370-7 doi: 10.1183/13993003.01537-2014..
- Esposito DB, Lanes SF, Donneyong M, Holick CN, Lasky JA, Lederer D, Nathan SD, O'Quinn S, Parker J, Tran TN. Idiopathic pulmonary fibrosis in US automated claims: incidence, prevalence and algorithm validation. Am J Respir Crit Care Med 2015.192:1200-1207. PMID:26241562
- Noble PW, Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan EA, Fishman RS, Glaspole I, Glassberg MK, Lancaster L, Lederer DJ, Leff JA, Nathan SD, Pereira CA, Sahn SA, Swigris JJ, Valeyre D, King TE. Pirfenidone for idiopathic pulmonary fibrosis: Analysis of pooled data from three multinational Phase 3 trials. ERJ Express. Published on December 2, 2015 as doi: 10.1183/13993003.00026-2015
- 11. Reichmann WM, Yu YF, Macaulay DS, Wu EQ, Nathan SD. Change in Forced Vital Capacity and Associated Subsequent Outcomes in Patients with Newly Diagnosed Idiopathic Pulmonary Fibrosis. Accepted to BMC Pulm Med September 2015
- Lancaster L, Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan EA, Fishman RS, Glaspole I, Glassberg MK, King TE, Lederer DJ, Lin Z, Nathan SD, Pereira CA, Swigris JJ, Valeyre D, Noble PW. Safety of Pirfenidone in Patients with Idiopathic Pulmonary Fibrosis: Integrated Analysis of Cumulative Data from 5 Clinical Trials. Accepted to BMJ Open Respiratory Research 10/08/2015.
- Yu YF, Macaulay DS, Reichmann WM, Wu EQ, Nathan SD. Association of early suspected acute exacerbations of idiopathic pulmonary fibrosis with subsequent clinical outcomes and healthcare resource utilization. Respir Med. 2015 Nov 6. pii: S0954-6111(15)30082-2. doi: 10.1016/j.rmed.2015.11.001
- 14. Shin S, King CS, Puri N, Shlobin OA, Brown AW, Ahmad S, Weir N, Nathan SD. Pulmonary artery size as a predictor of outcomes in idiopathic pulmonary fibrosis. Accepted ERJ Dec 7th 2015.

## REVIEWS

- 1. Nathan SD. The Future of Lung Transplantation. Chest 2015;147:309-316
- 2. Meyer KC, Danoff S, Lancaster L, Nathan SD. Management of Idiopathic Pulmonary Fibrosis in the Elderly Patient: Addressing Key Questions. Chest 2015;148:242-252
- 3. Brown AW, Nathan SD. Lung Transplantation in Interstitial Idiopathic Pneumonia: A Review. Respirology. 2015 Dec 3. doi: 10.1111/resp.12691
- 4. King CS, Nathan SD. Practical Considerations in the Pharmacologic Treatment of Idiopathic Pulmonary Fibrosis. Curr Opin Pulm Med 2015;21:479-489

## EDITORIALS

 Nathan SD, Corris PA. Upfront combination therapy: does the Ambition study herald a new era in the treatment of pulmonary arterial hypertension. Thorax. 2015 Nov 23. pii: thoraxjnl-2015-207854. doi: 10.1136/thoraxjnl-2015-207854

## BOOK CHAPTERS AND BOOKS

- King CS, Nathan SD. Treatment of Pulmonary Hypertension in Interstitial Lung Disease. For Pulmonary Hypertension and Interstitial lung disease. Edited by Robert P. Baughman, Roberto G. Carbone and Steven D. Nathan.
- 2. Shlobin OA, Nathan SD. Rare ILD and PH. For Pulmonary Hypertension and Interstitial lung disease. Edited by Robert P. Baughman, Roberto G. Carbone and Steven D. Nathan.
- 3. Nathan SD. Interstitial Lung Disease and Pulmonary Hypertension. Submitted 1/20/15 for Pulmonary Circulation: Diseases and their treatment, Fourth Edition. Editors, Peacock, Naeije and Rubin. CRC Press.

#### ORIGINAL RESEARCH ABSTRACTS & PRESENTATIONS TO INTERNATIONAL MEETINGS

- Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan E, Glaspole I, Glassberg MK, Gorina E, Kardatzke D, King TE, Lancaster L, Lederer DJ, Nathan SD, Pereira CA, Sahn SA, Spirig D, Swigris JJ, Valeyre D, Noble PW. Pirfenidone is efficacious in patients with idiopathic pulmonary fibrosis (IPF) and mild or more pronounced physiological impairment. Presented at ATS 2015
- Berry DA, Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan E, Glaspole I, Glassberg MK, King TE, Lancaster L, Lederer DJ, Lin Z, Nathan SD, Pereira CA, Sahn SA, Swigris JJ, Valeyre D, Noble PW. Pirfenidone Impact on Mortality in IPF patients: Bayesian Analysis. Presented at ATS 2015.
- Nathan SD, Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan EA, Glaspole I, Glassberg MK, King TE, Lancaster L, Lederer DJ, Lin Z, Pereira CA, Sahn SA, Swigris JJ, Valeyre D, Noble PW. Efficacy of Continued Treatment with Pirfenidone Following a Clinically Meaningful Decline in Percent Predicted Forced Vital Capacity in Patients with Idiopathic Pulmonary Fibrosis (IPF). Presented at ATS 2015
- 4. Lancaster L, Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan EA, Glaspole I, Glassberg MK, King TE, Lederer DJ, Lin Z, Nathan SD, Pereira CA, Sahn SA, Swigris JJ, Valeyre D, Noble PW. Safety of Pirfenidone in Patients with Idiopathic Pulmonary Fibrosis (IPF): Integrated Analysis of Cumulative Data from 5 Clinical Trials. Presented at ATS 2015
- Shin S, King C, Puri N, Shlobin AO, Brown AW, Nathan SD. Utilization of pulmonary arterial size and coronary artery calcification on HRCT imaging for prognostic stratification in patients with IPF. Presented at ATS 2015.
- 6. Raza M, Hostler D, Shlobin OA, Brown AW, Ahmad S, Nathan SD. The Incidence of Heart Failure with Preserved Ejection Fraction among Lung Transplant Recipients. Presented at ATS 2015.
- Kennedy GC, Choi Y, Ellers, S, Huang J, Pankratz D, Kim S-Y, Imtiaz U, Sindy N, Steele M, Brown K, Flaherty K, Lynch D, Myers J, Katzenstein A-L, Nathan SD, Colby T. Diagnosis of Idiopathic Pulmonary Fibrosis on Transbronchial biopsies Using Machine Learning and High Dimensional Transcriptional Data. Presented at ATS 2015.
- 8. AlGhamdi A, Daouk S, Lemma M, Collard H, Johannson K, Lederer DJ, Rosen G, Nathan SD Association of

Air Pollution on Survival in patients with Idiopathic Pulmonary Fibrosis. Presented at ATS 2015.

- 9. Rodriguez L, Nathan SD, Chhina MK, Leema M, Grant GM. A novel role for Thymosin beta4 in lung fibrosis via TGF-β mediated epithelial mesenchymal transition. Presented at ATS 2015.
- King CS, Ahmad S, Valentino V, Shlobin OA, Brown AW, Cattamanchi A, Singh R, Nathan SD. An International Survey of Early Post-operative Management Practice Patterns Following Lung Transplantation. Presented at ATS 2015
- Bui S, Chhina MK, Khandhar S, Mani H, Nathan SD, Grant GM. Effect of in-vitro combination Treatment with Curcumin, Aspirin and Sulforaphane on Idiopathic Pulmonary Fibrosis fibroblasts. Presented at ATS 2015
- 12. Ahmad S, Shafagati N, Shlobin OA, King C, Nathan SD, Brown AW. Association of Coagulation Protein Levels in Development of Deep Venous Thrombosis in Lung Transplant Recipients. Presented at ATS 2015
- 13. Kaya H, Brown AW, Amdur R, Nathan SD. Distance supplemental oxygen (DSO): An index to predict the survival in IPF. Presented at ATS 2015
- 14. Scholand MB, Baughman RP, Nathan SD, Barney JB, Cordova FC, Van Den Blink B, Shlobin OA, Engel P, Culver DA. Clinical Features of Patients with Moderate to Severe Sarcoidosis Associated Pulmonary Hypertension. Presented at ATS 2015
- Culver DA, Baughman RP, Cordova FC, Barney JB, Shlobin OA, Engel P, Van DenBlink B, Nathan SD. Six Minute Walk Testing in Patients with Sarcoidosis Associated Pulmonary Hypertension. Presented at ATS 2015
- 16. Reichmann WM, Yu Y, Macaulay D, Nathan SD. Association of change in forced vital capacity with healthcare resource utilization in patients with newly diagnosed idiopathic pulmonary fibrosis. Submitted to International society of pharmacoeconomics and outcomes research. ISPOR 20th Annual International Meeting to be held May 16-20, 2015
- 17. Kaya H, Nathan SD, Ahmad S, Shlobin OA, King CS, Weir N, Brown AW. An Index to Predict the Survival of Pulmonary Hypertension. Presented at ATS 2015.
- 18. Nathan SD, Reichmann WM, Macaulay D, Yu Y. Decline in Forced Vital Capacity and Clinical Outcomes in Newly Diagnosed Idiopathic Pulmonary Fibrosis Patients. Presented at ATS 2015.
- 19. Nathan SD, Reichmann WM, Macaulay D, Yu Y. Impact of Suspected IPF Acute Exacerbations and on Subsequent Clinical and Healthcare Resource Utilization Outcomes Newly Diagnosed Idiopathic Pulmonary Fibrosis Patients. Presented at ATS.
- Tetteh H, Burton NA, Lefrak EA, Ahmad S, Shlobin OA, Nathan SD. Double Donor Lobectomy Following Bilateral Sequential Single Lung Transplantation: A Case for Split Bilateral Lung Transplants. Presented at ISHLT April 2015.
- 21. Nathan SD, Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan EA, Fishman RS, Glaspole I, Glassberg MK, Glasscock KF, King TE, Lancaster L, Lederer DJ, Lin Z, Pereira CA, Swigris JJ, Valeyre D, Noble PW, Wells A. Benefit of continued pirfenidone treatment following hospitalisation within the first 6 months of treatment—ad hoc analysis from three Phase 3 trials in patients with idiopathic pulmonary fibrosis. Presented at ERS 2015.
- 22. Nathan SD, Albera C, Bradford WZ, Costabel U, du Bois RM, Fagan EA, Glaspole I, Glassberg MK, Kardatzke D, King TE, Kirchgaessler K, Lancaster LH, Lederer DJ, Pereira CA, Swigris JJ, Valeyre D, Noble PW. Effect of Pirfenidone (PFD) on Treatment-emergent (TE) All-cause Mortality (ACM) in Patients with Idiopathic Pulmonary Fibrosis (IPF): Pooled Analysis of Data from ASCEND and CAPACITY. Presented at ERS 2015.
- 23. Ahmad S, Brown AW, King C, Shlobin OA, Weir N, Stayrook S, Nathan SD. The Six Minute Walk Test Comparison to a Stair Climb Test. Poster at ERS 2015
- 24. Nathan SD, Albera C, Bradford WZ, Costabel U, Daigl M, du Bois RM, Fagan EA, Glaspole I, Glassberg MK, Kardatzke D, King TE, Kirchgaessler K, Lancaster LH, Lederer DJ, Pereira CA, Swigris JJ, Valeyre D, Noble PW. Effect of Pirfenidone on All-Cause Mortality in Patients with Idiopathic Pulmonary Fibrosis (IPF): Comparison of Pooled Analysis with Meta-Analysis from the ASCEND and CAPACITY Trials. Presented October 26th 2015 Chest Montreal.
- 25. Nathan SD, Albera C, Bradford WZ, Costabel U du Bois RM, Fagan EA, Glaspole I, Glassberg MK,

Kardatzke D, King TE, Kirchgaessler K, Lancaster LH, Lederer DJ, Pereira CA, Swigris JJ, Valeyre D, Noble PW. Effect of Pirfenidone on IPF-related Mortality Outcome Measures in Patients with Idiopathic Pulmonary Fibrosis (IPF): Pooled Data Analysis from the ASCEND and CAPACITY Trials. Presented October 28th 2015 Chest Montreal.

26. Dave K, Brown AW, King C, Nathan SD. Lung mass associated with Cystic Lung disease – An evasive diagnosis in a patient with Primary Sjögren's. Presented October Montreal Chest 2015.

#### PRESENTATIONS AT NATIONAL/INTERNATIONAL MEETINGS

- 1. When to treat PH in association with IPF. International Society for Heart and Lung Transplantation, Nice, France. April 15th, 2015. (SN)
- 2. "Lung Transplantation: The Medically Challenging CF Patient" International Society for Heart and Lung Transplantation, Nice, France. April 15th, 2015 (AWB)
- 3. Pulmonary hypertension in Lung Disease. 10th annual Bayer Pulmonary Hypertension Symposium, Berlin, Germany April 25th, 2015 (SN)
- 4. Idiopathic Pulmonary Fibrosis in Evolution: Proactive Recognition, Early Diagnosis, and an Advancing Standard of Care. Chairperson Symposium. American College of Physicians 4/30/2015. Boston, MA. (SN)
- 5. Medical Therapy for Group 3 PH: Could you, should you, how would you? ATS Symposium May 20th, 2015. Denver, CO. (SN)
- 6. Role of lung transplantation in connective tissue diseases. May 2015 ATS 2015, Denver, USA (OS)
- 7. Sarcoidosis-associated Pulmonary Hypertension. World Association for Sarcoidosis and other Granulomatous Diseases. Sao Paulo, Brazil June 6th, 2015. (SN)
- Benefit of continued pirfenidone treatment following hospitalisation within the first 6 months of treatment—ad hoc analysis from three Phase 3 trials in patients with idiopathic pulmonary fibrosis. Podium presentation at European Respiratory Society meeting, Amsterdam September 29th, 2015. (SN)
- 9. Effect of Pirfenidone (PFD) on Treatment-emergent (TE) All-cause Mortality (ACM) in Patients with Idiopathic Pulmonary Fibrosis (IPF): Pooled Analysis of Data from ASCEND and CAPACITY. Podium presentation at European Respiratory Society meeting, Amsterdam September 29th, 2015. (SN)
- 10. Chairperson session on Pulmonary Hypertension in ILD at American College of Chest Physicians October 27th, 2015. Montreal Canada. (SN)
- 11. Pulmonary Hypertension in ILD. American College of Chest Physicians October 27th, 2015. Montreal Canada. (SN)