

Academic Accomplishments 2019 – As of May 6, 2019 (Inova authors bolded)

ORIGINAL RESEARCH MANUSCRIPTS

1. Woolstenhulme JG, Guccione AA, Herrick JE, Collins JP, **Nathan SD**, Chan LE, Keyser RE. Left Ventricular Function Before and After Aerobic Exercise Training in Women Who Have Pulmonary Arterial Hypertension. *J Cardiopulm Rehabil Prev*. 2019 Jan 7. doi: 10.1097/HCR.0000000000000397.
2. Rhodes C et al. (**Nathan SD** among 118 co-authors). Genetic determinants of risk and survival in pulmonary arterial hypertension. Rhodes C et al. (**Nathan SD** among 118 co-authors). Genetic determinants of risk and survival in pulmonary arterial hypertension. *Lancet Res Med* Published online December 5, 2018 [http://dx.doi.org/10.1016/S2213-2600\(18\)30409-0](http://dx.doi.org/10.1016/S2213-2600(18)30409-0)
3. **Nathan SD**, Costabel U, Glaspole I, Glassberg MK, Lancaster LH, Lederer DJ, Pereira CA, Trzaskoma B, Morgenthien E, Limb SL, Wells AU. Incidence of Multiple Progression Events: Pooled Analysis of Patients With Idiopathic Pulmonary Fibrosis Treated With Pirfenidone. *CHEST* 2019; 155(4):712-719
4. Raghu G, Flaherty KR, Lederer DJ, Lynch DA, Colby TV, Myers JL, Groshong SD, Larsen BT, Chung JH, Steele MP, Benzaquen S, Calero K, Case A, Criner G, Guerrero J, **Nathan SD**, Rai N, Ramaswamy M, Hagemeyer L, Davis JR, Gauhar U, Pankratz DG, Choi Y, Huang J, Walsh PS, Neville H, Lofaro LR, Barth NM, Kennedy GC, Brown KK, Martinez FJ. Diagnostic accuracy of conventional transbronchial biopsies through the use of a molecular classifier for usual interstitial pneumonia pattern. *Lancet Res Med* Dec published online 4/1/2019 DOI:[https://doi.org/10.1016/S2213-2600\(19\)30059-1](https://doi.org/10.1016/S2213-2600(19)30059-1)
5. Agbor-Enoh S, Wang Y, Tunc I, Davis A, Jang MK, De Vlaminc I, Shah PD, Timofte I, **Brown AW**, Marihsta A, Bhatti K, Gorham S, Wylie J, Goodwin N, Yang Y, Patel K, Fideli U, Luikart H, Zhu J, Iacono A, Orens J, **Nathan SD**, Marboe C, Berry GJ, Quake SR, Khush K, Valantine HA. Trends of early allograft injury measured via donor-derived cell-free DNA and poor outcomes after lung transplantation. *EBioMedicine*. 2019 Jan 25. pii: S2352-3964(18)30606-6. doi:10.1016/j.ebiom.2018.12.029. [Epub ahead of print]
6. **Nathan SD**, Costabel U, Albera C, Behr J, Wuyts W, Kirchgassler KU, Stauffer J, Morgenthien E, Chou W, Noble PW. Efficacy and safety of pirfenidone for the treatment of patients with idiopathic pulmonary fibrosis and severe lung function impairment. Accepted 4/18/2019 *Res Med*
7. Moore C, Blumhagen RZ, Yang IV, Walts A, Powers J, Walker T, Bishop M, Russell P, Vestal B, Cardwell J, Markin CR, Mathai SK, Schwarz MI, Steele MP, Lee J, Brown KK, Loyd JE, Lynch D, Crapo JD, Silverman EK, Cho MH, James JA, Guthridge JM, Cogan JD, Kropski JA, Swigris JJ, Bair C, Kim DS, Ji W, Kim H, Song JW, Maier LA, Pacheco KA, Hirani N, Poon AS, Li F, Jenkins RG, Braybrooke R, Saini G, Maher TM, Molyneaux PL, Saunders P, Zhang Y, Gibson KF, Kass DJ, Rojas M, Sembrat J, Wolters PJ, Collard HR, Sundry JS, O'Riordan T, Streck ME, Noth I, Ma S, Porteous MK, Kreider ME, Patel NB, Inoue Y, Hirose M, Arai T, Akagawa S, Eickelberg O, Fernandez IE, Behr J, Mogulkoc N, Corte TJ, Glaspole I, Tomassetti S, Ravaglia C, Poletti V, Crestani B, Borie R, Kannengiesser C, Parfrey H, Fiddler C, Rassl D, Molina-Molina M, Machahua C, Worboys AM, Gudmundsson G, Isaksson HJ, Lederer DL, Podolanczuk AJ, Montesi SB, Bendstrup E, Danchel V, Selman M, Pardo A, Henry MT, Keane MP, Doran P, Vašáková M, Sterclova M, Ryerson CJ, Wilcox PG, Okamoto T, Furusawa H, Miyazaki Y, Laurent G, Baltic S, Prele C, Moodley Y, Shea BS, Ohta K, Suzukawa M, Narumoto O, **Nathan SD**, **Venuto DC**, **Woldehanna ML**, Kokturk N, de Andrade JA, Luckhardt T, Kulkarni T, Bonella F, Donnelly SC, McElroy A, Armstrong ME, Aranda A, Carbone RG, Puppo F, Beckman KB,

Nickerson DA, Fingerlin TE, Schwartz DA. Resequencing Study Confirms Host Defense and Cell Senescence Gene Variants Contribute to the Risk of Idiopathic Pulmonary Fibrosis. Accepted to Am J Respir Crit Care Med 04/17/2019.

REVIEWS

1. Benza R, Raina A, Kanwar MK, **Nathan SD**, Mathai SC. sGC stimulators: evidence in pulmonary hypertension and beyond. Accepted to the Journal of Rare Diseases Research and Treatment 11/2/17.
2. **King CS, Brown AW, Aryal S, Ahmad K**, Donaldson S. Critical Care of the Adult Cystic Fibrosis Patient. Chest. 2018; pii: S0012-3692(18)31123-1. doi: 10.1016/j.chest.2018.07.025. [Epub ahead of print].
3. **King CS, Shlobin OA**. Ask the Expert: Thyroid Disease in PAH. Advances in Pulm HTN. Accepted

CONSENSUS STATEMENTS

Wells AU, Poletti V, Behr J, Cassidy N, Costable U, Cottin V, Hansell DM, Masefield SC, Richeldi L, Ross D, Ancochea J, Antoniou KM, Bajwah S, Bouros D, Brown KK, Collard HR, Corte TJ, Crestani B, Dai H, Drent M, Egan JJ, Fell CD, Fischer A, Flaherty KR, Grutters JC, Hirani N, Inoue Y, Maher TM, Muller-Quernheim J, **Nathan SD**, Noble PW, Powell P, Robalo-Cordeiro C, Ryerson CJ, Ryu JH, Saltini C, Selman M, Sverzellati N, Taniguchi H, Undurraga A, Valeyre D, Vancheri C, Wuyts W, Xaubet A. Diagnosis and management of idiopathic pulmonary fibrosis - a combined physician and patient European Respiratory Society and European Lung Foundation consensus statement. Accepted Eur Res J May 14th, 2018

Nathan SD, Barbera JA, Gaine SP, Harari S, Martinez FJ, Olschewski H, Olsson KM, Peacock AJ, Pepke-Zaba J, Provencher S, Weissmann N, Seeger W. Pulmonary Hypertension in Chronic Lung Disease. Eur Respir J 2019; 53: 1801914 doi: 10.1183/13993003.01914-2018

BOOK CHAPTERS AND BOOKS

1. Idiopathic Pulmonary Fibrosis. (2nd edition) Edited by Keith Meyer, MD and **Steven Nathan, MD**. Published by Springer January 3rd, 2019. <https://www.springer.com/us/book/9783319999746>
<https://rd.springer.com/book/10.1007%2F978-3-319-99975-3>
2. **Aryal S, Ahmad K, Nathan SD**. Group 3 PH: Clinical Features and Treatment: For Encyclopedia of Respiratory Medicine, 2nd Edition Medicine being published by Elsevier.

ORIGINAL RESEARCH ABSTRACTS & PRESENTATIONS TO INTERNATIONAL MEETINGS

ISHLT 2019

1. **King, C; Aryal, S; Cochrane, A; Brown, AW; Shlobin, OA; Ahmad, K; Nathan, SD; Marinak, L; Fregoso, M; Chun, J; Shah, P; Desai, S; Katugaha, S**. Single Center Experience with Use of Letermovir for CMV Prophylaxis or Treatment in Thoracic Organ Transplant Recipients. Presented at ISHLT 2019 as oral presentation
2. Kim MK, **Brown AW, Shlobin OA, King C, Aryal S, Ahmad K, Cochrane A, Marinak L, Katugaha SB**. Cryptococcus laurentii Hip Infection after Lung Transplant. Junior Faculty Clinical Case Reports Presented at ISHLT 2019
3. **Brown AW, Fregoso M, Peterson J, Nayyar M, Cochrane A, Aryal A, Shlobin O, Pluhacek J, Lemma M, King C, Ramaswamy IK, Deeken JF, Nathan SD**. The Impact of Pharmacogenomics on Tacrolimus Dosing and Levels Among Lung Transplant Recipients. Presented to ISHLT 2019

4. **Ahmad K, Shlobin OA, Aryal S, Nathan SD, King C, Brown AW, Katugaha S.** Donor-Derived *Strongyloides* Hyperinfection Syndrome in a Lung Transplant Recipient. Junior Faculty Clinical Case Reports. Presented ISHLT 2019
5. Dhonti N, Della-Santina J, Bogar L, Mani H, Aryal S. Constrictive pericarditis after lung transplantation. Presented at ISHLT 2019
6. Inflammatory Events Precede Development of *De Novo* DSA after Lung Transplantation. Presented at ISHLT 2019 (12/18/18).
7. Kolaitis NA, Zamanian RT, de Jesus Perez VA, Badesch DB, Benza RL, Burger CD, Chakinala MM, Feldman J, Lammi MR, Mathai SC, Presberg KW, Robinson JC, Sager JS, **Shlobin OA**, Simon MA, Kawut SM, Singer JP, De Marco T. Demographic, Hemodynamic, and HRQL Differences between Methamphetamine-Associated and Idiopathic PAH: The Pulmonary Hypertension Association Registry (mini-oral presentation)
8. **Nathan SD.** Pro Con debate on treating vs not treating Group 3 PH.
9. **Shlobin OS.** Pro Con debate on treating vs not treating Group 3 PH. Session co-chair

ATS 2019

1. **Brown AW; Peterson J; Cheng J; Nunes Soares FS, MD; Aryal S, Ahmad K, Koslow M, Weir N, Shlobin OA, King C, Nathan SD.** Serial Change in the White Blood Cell Count as a Prognostic Indicator in Idiopathic Pulmonary Fibrosis. Accepted ATS 2019.
2. Huitema MP, Grutters JC, Post MC, Kouranos V, Shlobin OA, **Nathan S**, Wells A, Culver D, Barney J, Gupta R, Carmona E, Alhamad EH, Scholand MB, Wijsenbeek M, Ganesh S, Lower EE, Engel PJ, Baughman RP. Impact of parenchymal lung disease in echocardiographic estimate of pulmonary artery pressure in sarcoidosis patients. Accepted to ATS 2019
3. **Nathan SD**, Yang M, Morgenthien EA, Stauffer JL. Forced Vital Capacity in Patients With Idiopathic Pulmonary Fibrosis: Visit-to-Visit Variability and the Role of 6-Minute Walk Distance to Validate Changes. accepted to ATS 2019
4. Johannson KA, Noth E, Collard HR, Ley B, Thakur N, **Nathan SD.** Social and Environmental Determinants of Lung Function in Patients with Idiopathic Pulmonary Fibrosis. Accepted to ATS 2019
5. **Brown AW, Peterson J, Cheng J, Cannon B, King CK, Nathan SD.** White Blood Cell Count and Hospitalization as Additive Prognostic Indicators in Idiopathic Pulmonary Fibrosis. Accepted to ATS 2019
6. Stephenson BW, **Swierzbinski M, Ahmad K, Shlobin OA, Brown AW, Aryal S, Koslow M, King CS.** Filgrastim-Induced Acute Respiratory Distress Syndrome. Accepted to ATS 2019 (poster)
7. **King C, Freiheit, E, Brown AW, Venuto D, Flaherty K, Nathan SD.** Effects of Anticoagulation on Survival in Interstitial Lung Disease: An Analysis of the Pulmonary Fibrosis Foundation (PFF) Registry. Accepted to ATS 2019 (oral presentation)
8. **Podder S, Rahim H, Verster A, Shlobin O, King C, Brown AW, Nathan SD.** Complete Blood Count Parameters as Predictor of Outcomes in Patients with Pulmonary Arterial Hypertension. Accepted to ATS 2019
9. DesJardin JT, Kolaitis NA, Kime N, Kronmal R, Bartolome S, Benza R, Elwing J, Feldman J, Fineman J, Grinnan D, Horn E, Lammi MR, McConnell JW, Presberg K, Sager J, **Shlobin O**, Simon M, Thenappan T, De Marco T; PHAR Investigators. Increasing age is associated with worsening physical function despite more favorable cardiopulmonary hemodynamics: A Pulmonary Hypertension Association Registry (PHAR) report (accepted)
10. MP Huitema, JC Grutters, MC Post, Vaslis Kouranos, OA Shlobin, **S Nathan**, A Wells, DA Culver, J Barney, R Gupta, E Carmona, EH Alhamad, M Scholand, M Wijsenbeek, S Ganesh, EE Lower, PJ Engel, RP Baughman. Impact of parenchymal lung disease in echocardiographic estimate of pulmonary artery pressure in sarcoidosis patients. Accepted to ATS.

11. Archer-Chicko C, Al-Naamani N, Benza R, Feldman J, Berman Rosenzweig E, Horn E, Sager J, Presberg K, **Shlobin O**, Mathai S, McConnell JW, Burger C, Frantz R, Klinger J, Ventutuolo C, Eggert M, Zamanian R, Robinson J, Lammi M, Demarco T, Allen R, Elwing JM, Bull T, Badesch D, Williamson T, Ramani G, Thenappan T, Ford HJ, White JM, Runo J, Simon M, Bartolome S, Hemnes A, Grinnan D, Chakinala M, Kawut SM. Nurse staffing and the quality of life and outcomes of patients with pulmonary arterial hypertension: The Pulmonary Hypertension Association Registry (accepted).
12. Behr J, **Nathan SD**, Harari S, Wuyts W, Mogulkoç, Bishop N, Borous D, Antoniou K, Guiot J, Kramer M, Kirchgaessler KU, Bengus M, Gilberg F, Wells AU. Baseline Characteristics of All Patients Randomized in a Phase IIb Trial of Sildenafil Added to Pirfenidone in Patients With Advanced Idiopathic Pulmonary Fibrosis and Risk of Pulmonary Hypertension. Accepted to ATS 2019
13. Raghu G, van den Blink B, Hamblin MJ, **Brown AW**, Golden JA, Ho LA, Wijsenbeek MS, Vasakova M, Pesci A, Antin-Ozerkis DE, Meyer K, Kreuter M, Santin-Janin H, Aubin F, Mulder GH, Gupta R, Richeldi L. Long-term Safety and Efficacy of Recombinant Human Pentraxin-2 in Patients with Idiopathic Pulmonary Fibrosis. Accepted to ATS 2019.
14. Savale L, Humbert M, Wells AU, **Nathan SD**, Gupta R, Huitema MP, Jaïs X, Grutters JC, Kouranos V, Montani D, **Shlobin OA**, Sitbon O, Baughman R. Algorithm for pulmonary hypertension screening in sarcoidosis: A Delphi Consensus. Accepted to ATS 2019.
15. **McLaughlin J, Aryal S**. Leucocytoclastic vasculitis due to azathioprine. Accepted to ATS 2019 (poster)
16. **Tora I, Ahmad K, Brown AW, Koslow M, Aryal S**. IPF associated with extremely elevated IgE levels. Accepted to ATS 2019 (poster)
17. McMahan M, **Aryal S, Nathan SD**. Pulmonary hypertension in a patient with pyruvate Kinase deficiency treated with riociguat. Accepted to ATS 2019 (poster)
18. Jacqueline T. DesJardin, MD; Nicholas A. Kolaitis, MD; Noah Kime, BS; Richard Kronmal, PhD; Sonja Bartolome, MD; Raymond Benza, MD; Jean Elwing, MD; Jeremy Feldman, MD; Jeff Fineman, MD; Daniel Grinnan, MD; Evelyn Horn, MD; Matthew R. Lammi, MD; John Wesley McConnell, MD; Kenneth Presberg, MD; Jeffrey Sager, MD; **Oksana Shlobin, MD**; Marc Simon, MD, MS; Thenappan Thenappan, MD; Teresa De Marco, MD; PHAR Investigators. Age-Related Differences in Baseline Hemodynamics and Functional Assessments Among Patients in the Pulmonary Hypertension Association Registry.
19. **S.D. Nathan**, K. Flaherty, M. K. Glassberg, G. Raghu, J. Swigris, R. Alvarez, N. Ettinger, J. Loyd, P. Fernandes, H. Gillies, P. Shah, L. Lancaster. A Randomized, double-blind, placebo-controlled study to assess the safety and efficacy of pulsed, inhaled nitric oxide (iNO) at a dose of 30 mcg/kg-IBW/hr (iNO 30) in subjects at risk of Pulmonary Hypertension associated with Pulmonary Fibrosis (PH-PF) on Long Term Oxygen Therapy. Accepted as late breaker podium presentation ATS 2019.
20. Min J, Benza RL, Feldman JP, Rosenzweig EB, Horn E, Sager JS, Presberg KW, **Shlobin OA**, Mathai SC, McConnell JW, Burger CD, Frantz RP, Klinger JR, Ventetuolo CE, Eggert M, Zamanian RT, Robinson J, Lammi MR, De Marco T, Allen R, Elwing JM, Bull TM, Badesch DB, Williamson TL, Ramani G, Thenappan, T, Ford HJ, White R, Runo JR, Simon M, Bartolome S, Hemnes A, Grinnan D, Chakinala MM, Kawut SM, Al-Naamani N. Obesity and Quality of Life in Pulmonary Arterial Hypertension (PAH): The Pulmonary Hypertension Association Registry (PHAR). American Thoracic Society International Conference, May 2019 (Poster presentation).
21. Huitema MP, Grutters JC, Post MC, Kouranos V, **Shlobin OA, Nathan S**, Wells A, Culver D, Barney J, Gupta R, Carmona E, Alhamad EH, Scholand MB, Wijsenbeek M, Ganesh S, Lower EE, Engel PJ, Baughman RP. Impact of parenchymal lung disease in echocardiographic estimate of pulmonary artery pressure in sarcoidosis patients (ReSAPH).

PVRI meeting Barcelona, Feb 2019

S.D. Nathan, R. Alvarez, N. Ettinger, P. Fernandes, K. Flaherty, H. Gillies, M. Glassberg Ceste, L. Lancaster, J. Loyd, G. Raghu, P. Shah, J. Swigris. Actigraphy as a clinically meaningful endpoint to detect change after treatment with iNO (30 mcg/kg/hr) in patients with Pulmonary Hypertension associated with Pulmonary Fibrosis. Accepted to PVRI meeting Barcelona 2019.