A. BIOGRAPHICAL INFORMATION

Roham T. Zamanian, M.D. Division of Pulmonary & Critical Care Medicine Stanford University School of Medicine 300 Pasteur Drive, East Pavilion, Floor 3, M/C 5236 Palo Alto, CA 94304



B. ACADEMIC HISTORY

1. Colleges and Universities Attended					
1090	1004	Pachalar of Science	Riological Science		

1989 – 1994	Bachelor of Science , Biological Sciences University of California, Irvine
1995 - 1999	Doctor of Medicine University of California, Irvine College of Medicine
1999 - 2002	Internship and Residency, Internal Medicine University of California, Irvine Medical Center (UCIMC)
2002 - 2003	Pulmonary & Critical Care Fellowship Division of Pulmonary & Critical Care Medicine University of California, Irvine Medical Center
2003 - 2005	Pulmonary & Critical Care Fellowship Division of Pulmonary & Critical Care Medicine Stanford University Medical Center
2004 - 2006	eBay Advanced Fellowship in Pulmonary Vascular Disease Vera Moulton Wall Center for Pulmonary Vascular Disease

2. Board Certification

- 2003 American Board of Internal Medicine Internal Medicine
- 2006 American Board of Internal Medicine Pulmonary (recertified 2017)

Stanford University Medical Center

C. STANFORD UNIVERSITY EMPLOYMENT HISTORY

7/1/06 - 7/31/07	Instructor of Medicine Division of Pulmonary & Critical Care Medicine Vera Moulton Wall Center for Pulmonary Vascular Disease Stanford University School of Medicine
8/1/07 - 6/30/08	Acting Assistant Professor of Medicine Division of Pulmonary and Critical Care Medicine Vera Moulton Wall Center for Pulmonary Vascular Disease Stanford University School of Medicine
7/1/08 - 9/30/14	Assistant Professor of Medicine Division of Pulmonary and Critical Care Medicine Vera Moulton Wall Center for Pulmonary Vascular Disease

Stanford	University	/ School	of	Medicine

Associate Professor of Medicine 10/1/14 - 9/30/19 Division of Pulmonary and Critical Care Medicine Vera Moulton Wall Center for Pulmonary Vascular Disease Stanford University School of Medicine 2/1/09 - 6/30/12 Secondary Affiliation in Division of Immunology Stanford University School of Medicine 10/1/19 - 9/30/24Associate Professor of Medicine, UML (Reappointment) Division of Pulmonary and Critical Care Medicine Vera Moulton Wall Center for Pulmonary Vascular Disease Stanford University School of Medicine 06/2006 - Present Director, Adult PH Cardiac Catheterization Laboratory Adult Pulmonary Hypertension Clinical Service Division of Pulmonary & Critical Care Medicine Vera Moulton Wall Center for Pulmonary Vascular Disease Stanford University School of Medicine 01/2007 - Present Director, VMWC Clinical Database Vera Moulton Wall Center for Pulmonary Vascular Disease Stanford University School of Medicine 10/2007 - Present Director, Adult Pulmonary Hypertension Clinical Service Division of Pulmonary & Critical Care Medicine Vera Moulton Wall Center for Pulmonary Vascular Disease Stanford University School of Medicine

03/2022 - Present Associate Director

Vera Moulton Wall Center for Pulmonary Vascular Disease

Stanford University School of Medicine

D. PUBLIC AND PROFESSIONAL SERVICE

1. Society Membership & Leadership

- Pulmonary Hypertension Association Scientific Leadership Council. 2011- 2016
 - The PHCC Committee Chair Task Force #2 (funding & sustainability)
 - The Insurance and Advocacy Committee (member)
- International Right Heart Failure Foundation Scientific Working Group (member). 2014
- World Symposium on Pulmonary Hypertension (Nice, France 2018)
 - Taskforce #8 member Trials Design & New Therapies for PAH
- PHaware member, Medical Advisory Committee (2017-present)
- Pulmonary Vascular Research Institute Fellow
- American Thoracic Society Pulmonary Circulation Assembly Program Committee
- American College of Chest Physicians Fellow
- International Society for Heart and Lung Transplantation

Vera Moulton Wall Center 2016 pre-ATS symposium organizer
 —"Deep Phenotyping PAH"

2. Editorship

- American Thoracic Society Pulmonary Circulation Pulmonary Hypertension Journal Club (2007-2011)
- CHEST Pulmonary Vascular Section associate editor (2019-present)

3. AdHoc Reviewer

- New England Journal of Medicine
- Lancet
- Circulation
- Pulmonary Circulation
- Journal of the American College of Cardiology
- American Journal of Respiratory & Critical Care Medicine
- European Respiratory Journal
- CHEST
- Journal of Cardiac Failure
- International Journal of Rheumatology
- Biomarkers
- Lung
- PLOS & PLOS One
- American Heart Journal

4. Clinical Trial Committee Memberships

- ASCO1 Member, Steering and Protocol Development Committees.
 Rituximab for Scleroderma Associated Pulmonary Arterial Hypertension.
 NIH/NIAID (2010-2019)
- SYMPHONY Member, Steering Committee.
 A Study of Macitentan in Pulmonary Arterial Hypertension to Validate PAH-SYMPACT.
 Actelion (2012-2017)
- CMREF Ranolazine Chair, Data and Safety Monitor Board.
 A Randomized, Double-blind, Placebo Controlled, Multi-center Study to Assess the Effect of Ranolazine on Outcomes and Right Heart Function in PAH.
 Cardiovascular Medical Research Education Fund & Gilead Sciences (2013-2015)
- Pfizer #A1481324 Member, Revatio Clinical Endpoint Adjudication Committee.
 A Multinational Multicenter Study to Assess the Effects of Oral Sildenafil on Mortality in Adults with PAH. (2014 2021)
- mHealth PAH Chair, Data and Safety Monitor Board.
 A Mobile Health Intervention in Pulmonary Arterial Hypertension NIH/NHLBI (2017-2021)
- Actelion Member, Steering and Protocol Development Committees.
 PRELUDE: A Multicenter Study to Assess the Effects of Oral Macitentan on Right Heart Function in Early Pulmonary Vascular Disease. (2019 – 2020)

- Gossamer Biotech Member, Steering Committee.
 GB002 for the Treatment of Pulmonary Arterial Hypertension. (2019 Present)
- Triaxia Health Member, Steering Committee.
 A Multicenter Collaborative for Deep Molecular Phenotyping in PAH. (2019 Present)
- Aria CardioVascular Cardiac Implant for Treatment of PAH Chair, Data Safety Monitoring Board Member. (2021 – Present)
- Aerovate Therapeutics AV101 for Treatment of PAH Member, Data Safety Monitoring Board Member (2021 – Present)
- University of Quebec Apabetalone for Treatment of PAH Member, Data Safety Monitoring Board Member (2022 – Present)

5. Patents

• FK506 for the treatment of pulmonary hypertension – 2011 filed by Stanford. Edda Spiekerkoetter (primary), Marlene Rabinovitch, Phillip Beechy, Roham Zamanian

6. Grant Review / Study Sections

- Pulmonary VA Merit Grant Reviewer (2012)
- VA Merit Grant Pulmonary Board External Referee for William S. Middleton Memorial Veterans Hospital (2014)
- NHLBI Loan Repayment Program Reviewer (2019) 2019/08 ZHL1 CCT-X (C1) 1
- NHLBI Loan Repayment Program Reviewer (2021) NOT-OD-20-133
- British Heart Foundation (2021-2022) Senior Basic Science Research Fellowship FS/SBSRF/21/31016

7. Academic Service

PhD Assessment Committee Member - University of Copenhagen, Denmark (08/2019)
 Candidate: Christoffer Göransson, MD, PhD

Title: "The Role of Cardiovascular Magnetic Resonance Imaging in Assessment of Right Heart Adaptation in Pulmonary Arterial Hypertension".

E. FUNDING

CLINICAL TRIALS

Current:

Study: PHANTOM. Anastrozole in Pulmonary Arterial hypertension: AIPH2

Role: Principal Investigator for a multi-center study **Type:** Industry-sponsored multi-center clinical trial

Sponsor: National Institutes of Health / University of Pennsylvania

Dates:

Subjects: Total 81, Stanford 17 **Clinicaltrial.gov #:** NCT03229499

Study: PHAR, The Pulmonary Hypertension Association Registry

Role: Principal Investigator for a multi-center study **Type:** Multi-center Observational Registry / clinical trial

Sponsor: Pulmonary Hypertension Association

Dates:

Subjects: Total 1590, Stanford 92 **Clinicaltrial.gov #:** NCT04071327

Study: Open-Label, Extension Study of Levosimendan in Pulmonary Hypertension

Patients with Heart Failure and Reserved Left Ventricular Ejection Fraction

Role: Site PI

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (TENAX Therapeutics, Inc.)

Dates: 08/2019 - 07/2025 Subjects: Total 27, Stanford 3 Clinicaltrial.gov #: NCT03541603

Study: A Phase 2, Double-blind, Randomized, Placebo-controlled Study to Evaluate the

Effects of Sotatercept versus Placebo for the Treatment of Combined

Postcapillary and Precapillary Pulmonary Hypertension (Cpc-PH) due to Heart

Failure with Preserved Ejection Fraction (HFpEF)

Role: Site PI

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (Acceleron Pharma, Inc.)

Dates: 08/2022 - 08/2025 Subjects: Total 27, Stanford 3 Clinicaltrial.gov #: NCT03541603

Study: Stanford Pulmonary Hypertension Biobank

Role: Principal Investigator (Director)

Type: Academic Observational biobank

Sponsor: Vera Moulton Wall Center for Pulmonary Vascular Disease

Dates: 06/2007 – 06/2023

Subjects: Total 1125 Clinicaltrial.gov #: N/A

Study: Stanford Pulmonary Hypertension Database

Role: Principal Investigator (Director) **Type:** Academic Observational Database

Sponsor: Vera Moulton Wall Center for Pulmonary Vascular Disease

Dates: 06/2003 – 06/2023

Subjects: Total 1250 Clinicaltrial.gov #: N/A

Study: Utility of Device and App-based Mobile Health Monitoring as a Tool for

Evaluation of Clinical Response in PAH (DynAMITE PAH)

Role: Principal Investigator **Type:** Single Center Clinical Trial

Sponsor: Vera Moulton Wall Center for Pulmonary Vascular Disease / PHaware

Dates: 06/2021 – 06/2023

Subjects: Total 61

Clinicaltrial.gov #: NCT03893500

Study: A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Multi-Center Clinical

Study to Evaluate the Efficacy and Safety of Oral Inhalation of GB002 for the

Treatment of WHO Group 1 Pulmonary Arterial Hypertension (PAH

Role: Site PI

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (Gossamer Biotech)

Dates: 12/21 – 12/2023

Subjects: 4

Clinicaltrial.gov #: NCT04456998

Study: A Phase 3, randomized, double-blind, placebo-controlled study to evaluate the

efficacy and safety of ralinepag when added to pulmonary arterial hypertension (PAH) standard of care or PAH-specific background therapy in subjects with

World Health Organization (WHO) Group 1 PAH

Role: Site PI

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (United Therapeutics, Inc.)

Dates: 10/2019 – 10/2022

Subjects: Stanford 2

Clinicaltrial.gov #: NCT03626688

Past:

Role:

Study: The VISION Trial - A Randomized, Double-blind, Placebo-Controlled Study to

Evaluate the Safety and Efficacy of the Addition of Inhaled Iloprost in Patients

with Pulmonary Arterial Hypertension (PAH) Receiving Oral Sildenafil. Co-PI for a multi-center Study funded by industry (PI - Ramona Doyle)

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (Actelion Pharmaceutical)

Subjects: Total 67, Stanford 2
Clinicaltrial.gov #: NCT00302211

Study: Effect of Pioglitazone versus Bosentan on Metabolic Profiles and Outcomes of

Insulin Resistant Patients with Pulmonary Arterial Hypertension

Role: Senior Investigator for the overall study **Type:** Industry-sponsored single-center clinical trial

Sponsor: Industry (Actelion Pharmaceutical)

Subjects: Stanford 2

Clinicaltrial.gov #: NCT00825266

Study: The REVEAL Registry – Registry to Evaluate Early and Long-Term Pulmonary

Arterial Hypertension Disease Characterization and Management

Role: Principal investigator for a multi-center Study funded by industry

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (Actelion Pharmaceutical)

Subjects: Total 3500, Stanford 52 Clinicaltrial.gov #: NCT00370214

Study: Open Label Extension of the FREEDOM-C Trial - An International, Multicenter,

Randomized, Double-blind, Placebo- Controlled Comparison of the Efficacy and

Safety of Oral UT-15C Sustained Release Tablets in Combination with an Endothelin Receptor Antagonists and/or a Phosphodiestrase-5 Inhibitor in

Subjects with Pulmonary Arterial Hypertension.

Role: Principal investigator for a multi-center Study funded by industry

Type: Industry-sponsored multi-center clinical trial **Sponsor:** Industry (United Therapeutics Pharmaceutical)

Subjects: Total 900, Stanford 3 Clinicaltrial.gov #: NCT01027949

Study: The PROSPECT Registry – Registry to Evaluate Room Temperature Stable

Epoprostenol.

Role: Principal investigator for a multi-center Study funded by industry

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (Actelion Pharmaceutical)

Subjects: Total 200, Stanford 7

Clinicaltrial.gov #: N/A

Study: CONFRONT PAH – A 48-week Study of the Effect of Dual Therapy (Inhaled

Treprostinil and Tadafafil) Versus Mono-therapy (Tadalafil), 2 FDA Approved

Pulmonary Hypertension Medications.

Role: Senior Investigator for multi-center study funded by industry

Type: Industry-sponsored multi-center clinical trial **Sponsor:** Industry (United Therapeutics Pharmaceutical)

Subjects: Total 21, Stanford 11 (Goal 30)

Clinicaltrial.gov #: NCT01305252

Study: Study of Incidence of Respiratory Tract Adverse Events in Patients Treated With

Tyvaso® Compared to Other FDA Approved Pulmonary Arterial Hypertension

(PAH) Therapies (Aspire)

Role: Principal investigator for a multi-center study funded by industry

Type: Industry-sponsored multi-center clinical trial **Sponsor:** Industry (United Therapeutics Pharmaceutical)

Subjects: Total 1320, Stanford 42 **Clinicaltrial.gov #:** NCT01266265

Study: TrANsFoRM PAH – Phase II Study of Safety, Tolerability, and Efficacy of FK-506

(Tacrolimus) in Pulmonary Arterial Hypertension.

Role: Co-Senior Investigator for the overall study **Type:** University sponsored single-center clinical trial

Sponsor: University (Vera Moulton Wall Center & SPARK @ Stanford University)

Subjects: Total 24, Goal 40

Clinicaltrial.gov #: NCT01647945

Study: SYMPHONY – A multi-center, open-label, single-arm, Phase 3b study of

macitentan in patients with Pulmonary Arterial Hypertension to psychometrically

validate the PAH-SYMPACT instrument

Role: Investigator & Steering Committee Member of single-center study

Type: Industry sponsored single-center clinical trial **Sponsor:** Industry (Actelion Pharmaceuticals US, Inc.)

Subjects: Total 275

Clinicaltrial.gov #: NCT01841762

Study: LIBERTY - A Phase 2, Randomized, Double-BLInd, Placebo-Controlled Study of

UBEnimex in Patients with Pulmonary ARTerial Hypertension (WHO Group 1)

Role: Lead and Site Principal Investigator for a multi-center study

Type: Industry-sponsored multi-center clinical trial **Sponsor:** Industry (Eiger BioPharmaceuticals, Inc.)

Subjects: Total 61, Stanford 4 Clinicaltrial.gov #: NCT02664558

Study: A Phase 2, Dose-Ranging, Randomized, Double-Blind, Placebo-Controlled Study

of GS-4997 in Subjects with Pulmonary Arterial Hypertension

Role: Principal investigator for a multi-center study Industry sponsored multi-center clinical trial

Sponsor: Industry (Gilead Sciences) **Subjects:** Total 151, Stanford 0 **Clinicaltrial.gov #:** NCT02234141

Study: A Phase 2, Open-Label, Extension Study to Evaluate the Long-Term Safety and

Efficacy of Ubenimex in Patients with Pulmonary Arterial Hypertension (WHO

Group 1)

Role: Lead and Principal investigator for a multi-center study

Type: Industry-sponsored multi-center clinical trial **Sponsor:** Industry (Eiger BioPharmaceuticals, Inc.)

Subjects: Total 61, Stanford 4
Clinicaltrial.gov #: NCT02736149

Study: Treatment of Systemic Sclerosis-Associated Pulmonary Arterial Hypertension

with a Monoclonal Antibody to CD20 (Rituximab)

Role: Protocol Committee Member and Site Principal Investigator for Multicenter

Clinical Trial

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (National Institute of Allergy and Infectious Disease)

Subjects: Total 43, Stanford 9 (Goal 60)

Clinicaltrial.gov #: NCT01086540

Study: BEAT. A multicenter, double-blind, randomized, placebo-controlled, Phase 3

study to assess the efficacy and safety of oral BPS-314d-MR added-on to treprostinil, inhaled (Tyvaso®) in subjects with pulmonary arterial hypertension

Role: Principal investigator for a multi-center Study **Type:** Industry-sponsored multi-center clinical trial

Sponsor: Industry (Lung Biotechnology PBC)

Subjects: Total 273, Stanford 7 Clinicaltrial.gov #: NCT01908699

Study: OPUS. Us-Based Observational, Drug Registry of Opsumit (Macitentan) New

Users in Clinical Practice.

Role: Investigator & Steering Committee Member

Type: Observational Sponsor: Actelion Ltd.

Subjects: Total nearly 2000, Stanford 27 **Clinicaltrial.gov #:** NCT02126943

Study: U.S. CTEPH Registry

Role: Investigator & Steering Committee Member

Type: Observational [patient registry]

Sponsor: Bayer Healthcare Pharmaceuticals, Inc. / University of California, San Diego

Subjects: Total 750, Stanford 4 Clinicaltrial.gov #: NCT02429284

Study: A Double-Blind, Randomized, Placebo-Controlled Study of Levosimendan in

Pulmonary Hypertension Patients with Heart Failure and Reserved Left

Ventricular Ejection Fraction (PH HFpEF)

Role: Site PI

Type: Industry-sponsored multi-center clinical trial

Sponsor: Industry (TENAX Therapeutics, Inc.)

Subjects: Total 27, Stanford 3
Clinicaltrial.gov #: NCT03541603

GRANTS:

Current:

Grant: Complement Mediated Remodeling in Pulmonary Vascular Disease

Source: NIH / National Heart Lung and Blood Institute

Dates: 08/2020 – 06/2025

Role: Co-Investigator (PI: Kurt Stenmark)

Grant: Case-Control Study of Methamphetamine in Pulmonary Arterial Hypertension

Source: NIH / National Heart Lung and Blood Institute (R01HL159886)

Dates: 07/2021 – 06/2026

Role: Principle Investigator (Multi-PI: Steve Kawut, Roham Zamanian)

Grant: Elafin Therapy for Pulmonary Arterial Hypertension

Source: NIH / National Heart Lung and Blood Institute (P01 HL108797)

Dates: 09/2017 – 06/2023 (No Cost Extension)

Role: Project 3 Principal Investigator (Program PI: Marlene Rabinovitch)

Grant: Deep Learning for Pulmonary Embolism Imaging Decision Support

Source: National Institutes of Health / NLM (R01 LM012966)

Dates: 09/2017 – 06/2023 (No Cost Extension) **Role:** Co-Principal Investigator (PI: Nigam Shah)

Grant: Population-level Pulmonary Embolism Outcome Prediction with Imaging and

Clinical Data: A Multi-Center StudyDeep Learning for Pulmonary Embolism

Imaging Decision Support

Source: National Institutes of Health (R01 HL155410)

Dates: 08/2021 – 07/2025

Role: Co-Principal Investigator (PI: Nigam Shah)

Grant: Faculty Scholar Research Mentorship Award

Source: Vera Moulton Wall Center for Pulmonary Vascular Disease at Stanford

Dates: 09/2013 – 09/2023 **Role:** Principle Investigator

Grant: Reclassifying Pulmonary Arterial Hypertension with Machine Learned Immune

Phenotypes.

Source: NIH / National Heart Lung and Blood Institute (K23 HL151892)

Dates: 08/2020 – 08/2025

Role: Mentor (Mentee: Andrew Sweatt)

Grant: PAH Algorithm Validation Study

Source: Johnson & Johnson

Dates: 12/2020 – 12/2022 (No Cost Extension)

Role: Principle Investigator

Past:

Grant: Proteomics of Inflammation, Immunity and Pulmonary Arterial Hypertension **Source**: National Institutes of Health / the National Heart, Lung, and Blood Institute

Dates: 08/2010 – 08/2015; Completed.

Role: Human Core Director, (PI: Gary Nolan)

Grant: Elafin Therapy for Lung Diseases

Source: NIH / National Heart Lung and Blood Institute (P01 HL 108797)

Dates: 08/2011 – 08/2015 (No-cost extension to 05/2018)

Role: Human Core Co-Director (Program PI: Marlene Rabinovitch)

Grant: Stanford PAH Transplant and preparation center

Source: Continuing Medical Research and Education Fund (CMREF UL1 RR024986)

Dates: 04/2006 – 03/2014

Role: Stanford Site Co-PI (PI: Marlene Rabinovitch)

Grant: iPSC Derived Endothelial Cells as Surrogates using Pulmonary Hypertension as

a Prototype Disease

Source: NIH / National Heart Lung and Blood Institute (U01 HL107393)

Dates: 07/2011 – 06/2016.

Role: Co-Investigator, (PI: Marlene Rabinovitch)

Grant: Using Proteomic Signature as a Tool for Early Detection and Diagnosis of

Pulmonary Arterial Hypertension

Source: Blue Lips Foundation
Dates: 12/2016 - 09/2018
Role: Principal Investigator

Grant: Pulmonary Hypertension Breakthrough Initiative – Stanford PAH Transplant and

preparation center

Source: National Institutes of Health (Prime)/ Indiana University (R24 HL123767)

Dates: 04/2014 – 03/2019

Role: Co-PI (PI: M Geraci; Stanford PI: M Rabinovitch)

F. PUBLICATIONS

Peer-Reviewed [121 published]

a) Peer-Reviewed Original Research Publications [95]:

- 1. J Sechrist, MA Nieto, **RT Zamanian**, M Bronner-Fraser. Regulative Response of the Cranial Neural Tube after Neural Fold Ablation: Spatiotemporal Nature of Neural Crest Regeneration and up-regulation of *Slug. Development*. 1995 121, 4103-4115. (data collection and analysis, manuscript writing and editing)
- 2. CI Zoumalan, **RT Zamanian**, RL Doyle, MF Marmor. ERG evaluation of daily, high-dose sildenafil usage. *Doc Ophthalmol*, 2009 Jun; 118(3):225-31. (data collection and analysis, manuscript writing and editing)
- 3. GS Horng, E Ashley, L Balsam, B Reitz, **RT Zamanian**. Progressive dyspnea after CABG: Complication of Retained Epicardial Pacing Wires. *Ann Thorac Surg*. 2008 Oct; 86(4):1352-4. (data collection, manuscript writing and editing)
- 4. **RT Zamanian**, G Hansmann, S Snook, D Lilienfeld, K Rappaport, M Rabinovitch, G Reaven, RL Doyle. Insulin Resistance in Pulmonary Arterial Hypertension. *Eur Respir J.* 2009 Feb; 33(2):318-24. (study design, data collection and analysis, manuscript writing and editing)
- 5. VA de Jesus Perez, F Haddad, RH Vagelos, W Fearon, J Feinstein, **RT Zamanian.** Angina associated with left main coronary artery compression in pulmonary hypertension. *J Heart Lung Transplant.* 2009 May; 28(5):527-30. (data collection and analysis, manuscript writing and editing)
- 6. Haddad F, **Zamanian RT**, Beraud AS, Schnittger I, Feinstein J, Peterson T, Yang P, Doyle RL, Rosenthal D. A Novel Non-Invasive Method of Estimating Pulmonary Vascular Resistance in Patients with Pulmonary Arterial Hypertension. *J Am Soc Echocardiogr* 2009; 22: 523-529. (data collection and analysis, manuscript writing and editing)
- 7. Chung L, Liu J, Parsons L, Hassoun PM, McGoon M, Badesch DB, Miller DP, Nicolls MR, **Zamanian RT**. Characterization of connective tissue disease-associated pulmonary arterial hypertension from REVEAL: identifying systemic sclerosis as a unique phenotype. *Chest*. 2010 Dec; 138(6):1383-94. (study design, data collection and analysis, manuscript writing and editing)
- 8. Elliott CG, Barst RJ, Seeger W, Porres-Aguilar M, Brown LM, **Zamanian RT**, Rubin LJ. Worldwide physician education and training in pulmonary hypertension: pulmonary vascular disease: the global perspective. *Chest.* 2010 Jun; 137(6 Suppl):85S-94S. (manuscript writing and editing)
- 9. Kudelko KT, Nadeau K, Leung AN, Liu J, Haddad F, **Zamanian RT**, De Jesus Perez V. Epoprostenol-associated pneumonitis: diagnostic use of a T-cell proliferation assay. *J Heart Lung Transplant*. 2010 Sep; 29(9):1071-5. (data collection, manuscript writing and editing)

- 10. Kao L, Myer P, Nguyen L, **Zamanian RT**, Chung L. Colonic ulceration as an unusual manifestation of vasculopathy in systemic sclerosis. *Rheumatology* (Oxford). 2011 Mar; 50(3):626-8. (manuscript writing and editing)
- 11. Chandra SM, Razavi H, Kim J, Agrawal R, Kundu RK, de Jesus Perez V, **Zamanian RT**, Quertermous T, Chun HJ. Disruption of the apelin-APJ system worsens hypoxia-induced pulmonary hypertension. *Arterioscler Thromb Vasc Biol.* 2011 Apr; 31(4):814-20. (data collection and analysis, manuscript writing and editing)
- 12. Haddad F, Fuh E, Peterson T, Skhiri M, Kudelko KT, De Jesus Perez V, Winkelmayer WC, Doyle RL, Chertow GM, **Zamanian RT**. Incidence, correlates, and consequences of acute kidney injury in patients with pulmonary arterial hypertension hospitalized with acute right-side heart failure. *J Card Fail*. 2011 Jul; 17(7):533-9. (study design, data collection and analysis, manuscript writing and editing)
- 13. Hansmann G, Plouffe BD, Hatch A, von Gise A, Sallmon H, **Zamanian RT**, Murthy SK. Design and validation of an endothelial progenitor cell capture chip and its application in patients with pulmonary arterial hypertension. *J Mol Med (Berl)*. 2011 Jul 7. (data collection and analysis, manuscript writing and editing)
- 14. Haddad F, Peterson T, Fuh E, Kudelko K, de Jesus Perez V, Skhiri M, Vagelos R, Schnittger I, Denault AY, David R, Doyle R, **Zamanian RT**. Characteristics and Outcome following Hospitalization for Acute Right Heart Failure in patients with Pulmonary Arterial Hypertension. *Circ Heart Fail*. 2011 Nov;4(6):692-9. (study design, data collection and analysis, manuscript writing and editing)
- 15. Ayala E, Kudelko KT, Haddad F, **Zamanian RT**, De Jesus Perez V. The Intersection of Genes and Environment: Development of Pulmonary Arterial Hypertension in a patient with Hereditary Hemorrhagic Telangiectasia and Stimulant Exposure. *Chest.* 2012 Jun; 141(6):1598-600. (manuscript writing and editing)
- 16. Maxwell BG, Pearl RG, Kudelko KT, **Zamanian RT**, Hill CC. Airway Management and Perioperative Decision Making in the Patient with Severe Pulmonary Hypertension Who Requires Emergency Noncardiac Surgery. *J Cardiothorac Vasc Anesth*. 2012 Oct; 26(5):940-4. (manuscript writing and editing)
- 17. Perez VA, Rosenzweig E, Rubin LJ, Poch D, Bajwa A, Park M, Jain M, Bourge RC, Kudelko K, Spiekerkoetter E, Liu J, Hsi A, **Zamanian RT**. Safety and Efficacy of Transition from Systemic Prostanoids to Inhaled Treprostinil in Pulmonary Arterial Hypertension. *Am J Cardiol*. 2012 Nov 15; 110(10):1546-50. (data collection and analysis, manuscript writing and editing)
- 18. Barst RJ, Chung L, **Zamanian RT**, Turner M, McGoon M. Functional Class Improvement and Three-Year Survival Outcomes in Patients with Pulmonary Arterial Hypertension in the REVEAL Registry. *Chest.* 2013 Jul; 144(1):160-8. (data analysis, manuscript writing and editing)
- 19. Schaffer JM, Singh SK, Joyce DL, Reitz BA, Robbins RC, **Zamanian RT**, Mallidi HR. Transplantation for Idiopathic Pulmonary Artery Hypertension in the Lung Allocation Score Era. *Circulation*. 2013 Jun 25; 127(25):2503-13. (manuscript writing and editing)

- 20. Tian W, Jiang X, Tamosiuniene R, Sung YK, Qian J, Dhillon G, Gera L, Farkas L, Rabinovitch M, Zamanian RT, Inayathullah M, Fridlib M, Rajadas J, Peters-Golden M, Voelkel NF, Nicolls MR. Blocking macrophage leukotriene b4 prevents endothelial injury and reverses pulmonary hypertension. Sci Transl Med. 2013 Aug 28; 5(200):200ra117. (manuscript writing and editing)
- 21. Malhotra R, Paskin-Flerlage S, **Zamanian RT**, Zimmerman P, Schmidt JW, Deng DY, Southwood M, Spencer R, Lai CS, Parker W, Channick RN, Morrell NW, Elliott CG, Yu PB. Circulating angiogenic modulatory factors predict survival and functional class in pulmonary arterial hypertension. *Pulm Circ*. 2013 Apr; 3(2):369-80. (manuscript writing and editing)
- 22. Brunner NW, Ramachandran K, Kudelko KT, Sung YK, Spiekerkoetter E, Yang PC, **Zamanian RT**, Perez Vde J. A case of recurrent pericardial constriction presenting with severe pulmonary hypertension. *Pulm Circ.* 2013 Apr; 3(2):436-9. (data collection, manuscript writing and editing)
- 23. Inan OT, Pandia K, Giovangrandi L, **Zamanian RT**, Kovacs GT. A preliminary study investigating the quantification of beat-to-beat in seismocardiogram signals. *Conf Proc IEEE Eng Med Biol Soc.* 2013; 2013: 7286-9. (data collection, manuscript writing and editing)
- 24. Haddad F, Guihaire J, Skhiri M, Denault AY, Mercier O, Al-Halabi S, Vrtovec B, Fadel E, **Zamanian RT**, Schnittger I. Septal Curvature Is Marker of Hemodynamic, Anatomical, and Electromechanical Ventricular Interdependence in Patients with Pulmonary Arterial Hypertension. *Echocardiography*. 2014 Jul; 31(6):699-707. (manuscript writing and editing)
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- 88. Boehm M, Tian X, Ali MK, Mao Y, Ichimura K, Zhao M, Kuramoto K, Dannewitz Prosseda S, Fajardo G, Dufva MJ, Qin X, Kheyfets VO, Bernstein D, Reddy S, Metzger RJ, **Zamanian RT**, Haddad F, Spiekerkoetter E. Improving Right Ventricular Function by Increasing BMP Signaling with FK506. *Am J Respir Cell Mol Biol*. 2021 May 3. doi: 10.1165/rcmb.2020-0528OC. Online ahead of print. PMID: 33938785 (Manuscript writing and editing)

- 89. Montané BE, Fiore AM, Reznicek EC, Jain V, Jellis C, Rokadia H, Li M, Wang X, Dweik R, Loh E, Watkins AC, Haddad F, Amsallem M, **Zamanian RT**, Perez VJ, Heresi GA. Optimal Tricuspid Regurgitation Velocity to Screen for Pulmonary Hypertension in Tertiary Referral Centers. *Chest.* 2021 Jul 1:S0012-3692(21)01276-9. doi: 10.1016/j.chest.2021.06.046. Online ahead of print. PMID: 34217680 (Manuscript writing and editing)
- 90. Sweatt AJ, Miyagawa K, Rhodes CJ, Taylor S, Del Rosario PA, Hsi A, Haddad F, Spiekerkoetter E, Bental-Roof M, Bland RD, Swietlik EM, Gräf S, Wilkins MR, Morrell NW, Nicolls MR, Rabinovitch M, **Zamanian RT**. Severe Pulmonary Arterial Hypertension is Characterized by Increased Neutrophil Elastase and Relative Elafin Deficiency. *Chest*. 2021 Jun 25:S0012-3692(21)01255-1. doi: 10.1016/j.chest.2021.06.028. Online ahead of print. PMID: 34181952 (study design, data collection and analysis, manuscript writing and editing)
- 91. Haddad F, Contrepois K, Amsallem M, Denault AY, Bernardo RJ, Jha A, Taylor S, Arthur Ataam J, Mercier O, Kouznetsova T, Vonk Noordegraaf A, **Zamanian RT**, Sweatt AJ. The Right Heart Network and Risk Stratification in Pulmonary Arterial Hypertension. Chest. 2021 Nov 11:S0012-3692(21)04275-6. doi: 10.1016/j.chest.2021.10.045. Online ahead of print. PMID: 34774527 (study design, data collection and analysis, manuscript writing and editing)
- 92. Frantz RP, Benza RL, Channick RN, Chin K, Howard LS, McLaughlin VV, Sitbon O, **Zamanian RT**, Hemnes AR, Cravets M, Bruey JM, Roscigno R, Mottola D, Elman E, Zisman LS, Ghofrani HA. TORREY, a Phase 2 study to evaluate the efficacy and safety of inhaled seralutinib for the treatment of pulmonary arterial hypertension. Pulm Circ. 2021 Nov;11(4):20458940211057071. doi: 10.1177/20458940211057071. eCollection 2021 Oct-Dec. PMID: 34790348. (manuscript writing and editing)
- 93. Thomas CA, Lee J, Bernardo RJ, Anderson RJ, Glinskii V, Sung YK, Kudelko K, Hedlin H, Sweatt A, Kawut SM, Raj R, **Zamanian RT**, de Jesus Perez V. Prescription Patterns for Pulmonary Vasodilators in the Treatment of Pulmonary Hypertension Associated With Chronic Lung Diseases: Insights From a Clinician Survey. Front Med (Lausanne). 2021 Dec 3;8:764815. doi: 10.3389/fmed.2021.764815. eCollection 2021. PMID: 34926507 (study design, data analysis, manuscript writing and editing)
- 94. Haddad F, Ataam JA, Amsallem M, Cauwenberghs N, Kuznetsova T, Rosenberg-Hasson Y, **Zamanian RT**, Karakikes I, Horne BD, Muhlestein JB, Kwee L, Shah S, Maecker H, Knight S, Knowlton K. Insulin Growth Factor Phenotypes in Heart Failure With Preserved Ejection Fraction, an INSPIRE Registry and CATHGEN Study. J Card Fail. 2021 Dec 31:S1071-9164(21)00526-1. doi: 10.1016/j.cardfail.2021.12.012. Online ahead of print. PMID: 34979242. (study design, data analysis, manuscript writing and editing)
- 95. Bernardo RJ, Lu D, Ramirez RL 3rd, Hedlin H, Kawut SM, Bull T, De Marco T, Ford HJ, Grinnan D, Klinger JR, McConnell JW, Berman-Rosenzweig E, Shlobin OA, **Zamanian RT**, de Jesus Perez VA; PHAR Study Group. Hispanic Ethnicity and Social Determinants of Health in Pulmonary Arterial Hypertension: The Pulmonary Hypertension Association Registry. Ann Am Thorac Soc. 2022 Mar 3. doi: 10.1513/AnnalsATS.202109-1051OC. Online ahead of print. PMID: 35239467. (study design, data collection and analysis, manuscript writing and editing)
- b) Other: Peer-Reviewed Commentaries, Reviews, and State-of-the Art Publications [26]:

- 1. J Olsson, **RT Zamanian.** Toxicity of Local Anesthetics in the Emergency Department. emedicine (Emergency Medicine) Online. 2005 www.emedicine.com
- 2. J Olsson, **RT Zamanian**, JA Feinstein, RL Doyle. Surgical Strategies for Management of Pulmonary Arterial Hypertension. *Semin Respir Crit Care Med.* 2005 Aug; 26(4):417-28.
- 3. E Ketchum, **RT Zamanian**, D Fleischmann. CT-Angiography of Pulmonary Artery Thrombi and Aneurysms in Hughes-Stovin Syndrome. *Am J Roentgenol*. 2005 Aug; 185(2):330-2.
- 4. **RT Zamanian**, F Haddad, RL Doyle, A Weinacker. Management Strategies for Patients with Pulmonary Hypertension in the Intensive Care Unit. *Critical Care Medicine*, 2007 Sep; 35(9):2037-50.
- 5. **RT Zamanian**, M Gould. Effectiveness and cost effectiveness of thrombolysis in patients with acute pulmonary embolism. *Curr Opin Pulm Med*, 2008 Sep; 14(5):422-6.
- 6. CE Ventetuolo, RL Benza, AJ Peacock, **RT Zamanian**, DB Badesch, SM Kawut. Surrogate and combined end points in pulmonary arterial hypertension. *Proc Am Thorac Soc.* 2008 Jul 15; 5(5):617-22. (manuscript writing and editing)
- 7. G Hansmann, **RT Zamanian**. PPARγ Activation: A Novel Treatment for Pulmonary Arterial Hypertensions. *Sci Transl Med*. 2009 Dec 23;1(12):12ps14.
- 8. Banerjee D, Haddad F, **Zamanian RT**, Nagendran J. Right ventricular failure: a novel era of targeted therapy. *Curr Heart Fail Rep.* 2010 Dec; 7(4):202-11. (manuscript writing and editing)
- 9. de Jesus Perez V, Kudelko K, Snook S, **Zamanian RT**. Drugs and toxins-associated pulmonary arterial hypertension: lessons learned and challenges ahead. *Int J Clin Pract* Suppl. 2011 Jan; (169):8-10.
- 10. Perez VA, **Zamanian RT**. Chronic thromboembolic pulmonary hypertension. *N Engl J Med.* 2011 Apr 28; 364(17):1677.
- 11. Haddad F, Kudelko K, Mercier O, Vrtovec B, **Zamanian RT**, de Jesus Perez V. Pulmonary hypertension associated with left heart disease: characteristics, emerging concepts, and treatment strategies. *Prog Cardiovasc Dis.* 2011 Sep-Oct; 54(2):154-67. (manuscript writing and editing)
- 12. Perez VA, Haddad F, **Zamanian RT**. Diagnosis and management of pulmonary hypertension associated with left ventricular diastolic dysfunction. *Pulm Circ*. 2012 Apr; 2(2):163-9.
- 13. Waxman AB, **Zamanian RT**. Pulmonary Arterial Hypertension: New insights into the optimal role of current and emerging prostacyclin therapies. *Am J Cardiol*. 2013 Mar 4; 111(5Suppl):1A-16A.
- 14. Mehra MR, Park MH, Landzberg MJ, Lala A, Waxman AB; International Right Heart Failure Foundation Scientific Working Group (**Zamanian RT**). Right heart failure: toward a common language. *J Heart Lung Transplant*. 2014 Feb; 33(2):123-6 (consensus discussion, manuscript writing and editing)

- 15. Nickel NP, O'Leary JM, Brittain EL, Fessel JP, **Zamanian RT**, West JD, Austin ED. Kidney dysfunction in patients with pulmonary arterial hypertension. *Pulm Circ.* 2017 Mar 13; 7(1):38-54. eCollection 2017 Mar. Review. (manuscript writing and editing)
- 16. Elinoff JM, Agarwal R, Barnett CF, Benza RL, Cuttica MJ, Gharib AM, Gray MP, Hassoun PM, Hemnes AR, Humbert M, Kolb TM, Lahm T, Leopold JA, Mathai SC, McLaughlin VV, Preston IR, Rosenzweig EB, Shlobin OA, Steen VD, **Zamanian RT**, Solomon MA. Challenges in Pulmonary Hypertension: Controversies in Treating the Tip of the Iceberg. *Am J Respir Crit Care Med*. 2018 Feb 9. doi: 10.1164/rccm.201710-2093PP. (manuscript writing and editing)
- 17. Taylor S, Dirir O, **Zamanian RT**, Rabinovitch M, Thompson AAR. The Role of Neutrophils and Neutrophil Elastase in Pulmonary Arterial Hypertension. *Front Med (Lausanne)*. 2018 Aug 3;5:217. doi: 10.3389/fmed.2018.00217. eCollection 2018. Review. (manuscript writing and editing)
- 18. McCullough M, Kholdani C, **Zamanian RT**. Prevention of Deep Vein Thrombosis and Pulmonary Embolism in High-Risk Medical Patients. *Clin Chest Med*. 2018 Sep;39(3):483-492. doi: 10.1016/j.ccm.2018.04.002. Review. (manuscript writing and editing)
- 19. Ramirez RL 3rd, Perez VJ, **Zamanian RT**. Methamphetamine and the risk of pulmonary arterial hypertension. *Curr Opin Pulm Med*. 2018 Sep;24(5):416-424. doi: 10.1097/MCP.00000000000513. (manuscript writing and editing)
- 20. Sitbon O, Gomberg-Maitland M, Granton J, Lewis MI, Mathai SC, Rainisio M, Stockbridge NL, Wilkins MR, **Zamanian RT**, Rubin LJ. Clinical trial design and new therapies for pulmonary arterial hypertension. *Eur Respir J.* 2019 Jan 24;53(1):1801908. (manuscript writing and editing)
- 21. Nickel NP, Yuan K, Dorfmuller P, Provencher S, Lai YC, Bonnet S, Austin ED, Koch CD, Morris A, Perros F, Montani D, **Zamanian RT**, de Jesus Perez VA. Beyond the Lungs: Systemic Manifestations of Pulmonary Arterial Hypertension. *Am J Respir Crit Care Med*. 2020 Jan 15;201(2):148-157. (manuscript writing and editing)
- 22. Ryan JJ, Melendres-Groves L, **Zamanian RT**, Oudiz RJ, Chakinala M, Rosenzweig EB, Gomberg-Maitland M. Care of patients with pulmonary arterial hypertension during the coronavirus (COVID-19) pandemic. *Pulm Circ.* 2020 Apr 29;10(2):2045894020920153. (manuscript writing and editing)
- 23. De Jesus Perez VA, **Zamanian RT**. No Good Deed Goes Unpunished: Mitomycin-Induced Pulmonary Venoocclusive Disease and Cancer. *Chest*. 2021 Mar;159(3):910-911. doi: 10.1016/j.chest.2020.10.060. PMID: 33678275 (manuscript writing and editing)
- 24. Ramirez RL 3rd, Pienkos SM, de Jesus Perez V, **Zamanian RT**. Pulmonary Arterial Hypertension Secondary to Drugs and Toxins. *Clin Chest Med*. 2021 Mar;42(1):19-38. doi: 10.1016/j.ccm.2020.11.008. PMID: 33541612 Review. (manuscript writing and editing)
- 25. Oldham WM, Hemnes AR, Aldred MA, Barnard J, Brittain EL, Chan SY, Cheng F, Cho MH, Desai AA, Garcia JGN, Geraci MW, Ghiassian SD, Hall KT, Horn EM, Jain M, Kelly RS, Leopold JA, Lindstrom S, Modena BD, Nichols WC, Rhodes CJ, Sun W, Sweatt AJ, Vanderpool RR, Wilkins MR, Wilmot B, **Zamanian RT**, Fessel JP, Aggarwal NR, Loscalzo J, Xiao L. NHLBI-CMREF Workshop Report on Pulmonary Vascular Disease Classification:

- JACC State-of-the-Art Review. *J Am Coll Cardiol*. 2021 Apr 27;77(16):2040-2052. doi: 10.1016/j.jacc.2021.02.056. PMID: 33888254 (manuscript writing and editing)
- 26. Condon DF, Agarwal S, Chakraborty A, Auer N, Vazquez R, Patel H, **Zamanian RT**, de Jesus Perez VA. Novel Mechanisms Targeted by Drug Trials in Pulmonary Arterial Hypertension. Chest. 2021 Oct 13:S0012-3692(21)04093-9. doi: 10.1016/j.chest.2021.10.010. Online ahead of print. PMID: 34655569. (manuscript writing and editing)

c) Non-Peer Reviewed [2 published]

- 1. **RT Zamanian.** Nosocomial Infections in the Intensive Care Unit. *Respiratory Therapy International*, 1996 Vol 5 (1), 87-89.
- 2. **RT Zamanian.** Double Lung Transplantation in Cystic Fibrosis Patients. *Respiratory Therapy International*, 1996 Vol 5 (1), 39-40.

Books Edited & Book Chapters (5 published)

- 1. M Brenner, M Safani, G Heal, F Mazdisnian, R Klein, **R Zamanian**, S Gallacher, H Poggemeyer, G Foster, F Daneschvar, M Krutzik, A Wilson. Current Clinical Strategies: Manual of Critical Care Medicine. 2002-2003 Edition. CCS Publishing.
- DV Daniels, SG Rockson, R Vagelos. Concise Cardiology: An Evidence-Based Handbook Chapter 10: Pulmonary Hypertension. F Haddad, RL Doyle, JC Liu, RT Zamanian. Lippincott Williams & Wilkins 2008.
- O Distler et al. Scleroderma modern aspects of pathogenesis, diagnosis, and therapy. Chapter 4: PAH in Systemic Sclerosis. L Chung & RT Zamanian. Auflage – Bermen: UNI-MED, 2009.
- 4. BA Maron, **RT Zamanian**, AB Waxman. Pulmonary Hypertension Basic Science to Clinical Medicine. Springer 2015.
- 5. YK Lai, RT Zamanian, K Kudelko. Manual of Clinical Anesthesiology, 2nd Edition, Chapter 48. Pulmonary Hypertension and Perioperative Management Strategies. Wolters Kluwer 2021.

G. Lectureships and Selected Presentations

International

- "Role of PPAR-gamma in PAH"
 Clinical trial debate organizer
 Pulmonary Vascular Research Institute Annual Meeting, January 2009
 Mexico City, Mexico
- "Insulin Resistance in Pulmonary Arterial Hypertension" European Respiratory Society, September 2010 Barcelona, Spain

 "Refining Views of Co-morbidities and Vascular Responsiveness in Pulmonary Arterial Hypertension"

Pulmonary Vascular Medicine Grand Rounds, September 2011 Sheffield University, UK

- "Novel Future Therapeutics in Pulmonary Arterial Hypertension"
 Asia Pacific Cardiology Conference, February 2013
 Pattaya, Thailand
- "An Update on Insulin Resistance in Pulmonary Arterial Hypertension"
 International Society for Heart & Lung Transplantation Society, April 2013
 Montreal. Canada
- "Methamphetamine Associated Pulmonary Arterial Hypertension" European Respiratory Society, September 2013 Barcelona, Spain
- "Methamphetamine Associated Pulmonary Arterial Hypertension" Stanford CV Institute – Gachon University Collaborative, July 2014 Incheon, Korea
- "Deep Phenotyping in PAH: The Diagnostic & Therapeutic Implications of Translational Approach to Disease"
 Toronto General Hospital, Pulmonary and Critical Care Grand Rounds, April 2015
 Toronto, Canada
- "Methamphetamine Associated Pulmonary Arterial Hypertension" Drug Induced Pulmonary Hypertension Symposium, June 2015 Vienna, Austria
- "Ubenimex: A leukotriene hydrolase inhibitor for the potential treatment of PAH" Bayer PH Global Forum, June 2016 Berlin, Germany
- "Is there a role for rituximab in the treatment of systemic sclerosis-associated PAH?"
 Bayer PH Global Forum, June 2016
 Berlin, Germany
- "Application of Proteomic Technology to Pulmonary Vascular Diseases" Stanford CV Institute – Gachon University Collaborative, July 2016 Incheon, Korea
- "From Clinical Classification to Endo-Phenotyping: A journey through characterization of a rare disease."
 Korean Society of Hypertension, November 2017

Seoul, South Korea

"Why do some drugs/trials fail?"
 World Symposium on Pulmonary Hypertension 2018 – Member on Taskforce 8 – Clinical trial design, February 2018

- "Steps Towards Precision Medicine in Pulmonary Arterial Hypertension"
 4th Annual Meeting of Japanese Pulmonary Circulation and Pulmonary Hypertension Society, June 2019
 Hamamatsu, Japan
- "Modern-Day Risk Stratification in Pulmonary Arterial Hypertension"
 University of Copenhagen, Rigshospitalet Division of Cardiology, Aug 2019
 Copenhagen, Denmark
- "Safety and Tolerability of Rituximab in SSc-PAH"
 European Respiratory Society International Conference, Sept 2019
 Madrid, Spain
- "Hemodynamics in PAH"
 Asociación Civil de Investigación y Desarrollo on Salud, Aug 2020
 Argentina, Virtual
- "Methamphetamine Associated Pulmonary Arterial Hypertension" Asociación Civil de Investigación y Desarrollo on Salud, Aug 2020 Brazil, Virtual
- "Mild PH Should Not be Treated with PAH Therapies" Pulmonary Vascular Research Institute, July 2021 Global, Virtual – Pro/Con Debate
- "The Evolving Landscape of PAH Clinical Trials"
 CardioVascular Clinical Trialists Forum Global, Oct 2021
 Global, Virtual
- "Updates on the Diagnosis and Treatment of PAH" Korean Society of Hypertension, Nov 2021 Incheon, South Korea, Virtual

United States

- "The New Era in Chronic Obstructive Pulmonary Disease" Medicine Ground Rounds, October 2004 Doctor's Medical Center, Modesto, CA
- "An Update on Pulmonary Arterial Hypertension" Medicine Ground Rounds, December 2004 St. Luke's Hospital, San Francisco, CA
- "Management Strategies in Pulmonary Arterial Hypertension" Medicine Ground Rounds, January 2005 Highland Hospital, Oakland, CA
- "Current Research & Future Therapies for Pulmonary Arterial Hypertension" Pulmonary Hypertension Association - California PH Forum Burlingame, CA, June 2005

- "Diagnosis and Treatment of Pulmonary Arterial Hypertension" Medicine Grand Rounds, July 2006 St. Rose Hospital, Hayward, CA
- "Insulin Resistance in Pulmonary Arterial Hypertension" Pulmonary Medicine Grand Rounds, February 2007 University of Rochester, Rochester, NY
- "Novel Biomarkers and Disease Modifiers in Pulmonary Arterial Hypertension" Vascular Biology Seminar, March 2007 National Institutes of Health, Washington DC
- "Insulin Resistance in Pulmonary Arterial Hypertension"
 Pulmonary & Critical Care Medicine Grand Rounds, June 2007
 Columbia University Medical Center, New York, NY
- "An Update on the Management of Pulmonary Arterial Hypertension" Medicine Grand Rounds, June 2007 Sequoia Hospital, Redwood City, CA
- "Diagnosis and Management of Pulmonary Arterial Hypertension" Medicine Grand Rounds, June 2010 Eden Medical Center, Castro Valley, CA
- Discovering Novel Biomarkers, Risk Factors, and Etiologies A New Wave of Clinical Research in Pulmonary Arterial Hypertension"
 Pulmonary & Critical Care Medicine Grand Rounds, May 2010
 University of California, San Diego, CA
- "Controversies in Management of Pulmonary Arterial Hypertension" Medicine Grand Rounds, July 2011 John Muir Medical Center, Concord, CA
- "Guide to Diagnosis and Treatment of Pulmonary Arterial Hypertension"
 Primary Care Medicine Grand Rounds, November 2011
 St. Joseph Medical Center, Phoenix, AZ
- "Refining Views of Co-morbidities and Vascular Responsiveness in Pulmonary Arterial Hypertension"
 Pulmonary & Critical Care Grand Rounds, December 2011
 Baylor College of Medicine, Houston, TX
- "New Concepts and Controversies in Pulmonary Arterial Hypertension" Cardiology Grand Rounds, April 2012 Allegheny General Hospital, Pittsburgh, PA
- "Impact of Insulin Resistance in Pulmonary Hypertension"
 American Thoracic Society International Conference, May 2012
 San Francisco, CA

- "Breathing Better Oxygen supplementation and Pulmonary Rehabilitation in PAH" Pulmonary Hypertension Association International Conference, June 2012 Orlando, FL
- "Refining Views of Co-morbidities and Vascular Responsiveness in Pulmonary Arterial Hypertension"
 Pulmonary & Critical Care Grand Rounds, October 2012
 University of California, Irvine College of Medicine, Orange, CA
- "Prognostic Utility of Combined Biomarkers in PAH"
 Clinical Research Lecture Series, November 2012
 Genentech, South San Francisco, CA
- "Alterations in Glucose Metabolism and PAH"
 American Thoracic Society International Conference, May 2013
 Philadelphia, PA
- "Tacrolimus for pulmonary hypertension approaching the disease using high throughput screening of BMPR2 mutant animal"
 Pulmonary Hypertension Drug Discovery and Development Symposium, July 2014 US-FDA, Washington DC
- "Dual Upfront Therapy for Pulmonary Arterial Hypertension" National Jewish Hospital, September 2014 Denver, CO
- "BPA is urgently Necessary for Treatment of CTEPH in USA" UCSD National Proceedings: CTEPH, Feb 2016 San Diego, CA
- "Exercise is an Effective Treatment for Pulmonary Hypertension" University of Pennsylvania Fishman Symposium, April 2016 Philadelphia, PA
- "Fostering Collaborations to Develop Robust Clinical Trials for Rare Diseases" World Orphan Drug Congress, April 2016 Washington DC
- "All Atrial Septal Defects with Pulmonary Hypertension Should be Closed" Stanford CVI ACHD Symposium, March 2016 Stanford, CA
- "Overcoming Challenges of Clinical Trials for Rare Diseases: Lessons from PAH" Stanford CVI- Karolinska Institute Joint Symposium, October 2016 Stanford, CA
- "Management of Pulmonary Hypertension in Solid Organ Transplant" Ohio State University CTC Grand Rounds, December 2016 Columbus, OH
- "Methamphetamine Associated Pulmonary Hypertension"

PAIRE Research Institute invited Speakership, April 2017 Oakland, CA

- "Transplantation for PH in Era of LAS"
 International Society for Heart and Lung Transplantation, April 2017
 San Diego, CA
- "Advances in Pulmonary Hypertension"
 Dignity Health Norton Thoracic Institute. Advanced Lung Disease & Lung Transplant Symposium, February 2018
 Phoenix, AZ
- "From Clinical Classification to Precision-Phenotyping: Envisioning Precision Medicine in Pulmonary Hypertension" Keynote Speaker, PHA International Conference, June 2018 Orlando, FL
- "Features and Outcomes of Methamphetamine Associated Pulmonary Hypertension" University of North Carolina Pulmonary Grand Rounds, Nov 2018 Raleigh, NC
- "Autoimmunity and Inflammation in Pulmonary Arterial Hypertension"
 North Carolina Research Triangle Pulmonary Hypertension Symposium, Nov 2018
 Durham, NC
- "Future of Clinical Trials in PAH"
 Cleveland Clinic Pulmonary Hypertension Symposium, Nov 2019
 Cleveland, OH
- "Safety and Tolerability of Rituximab in SSc-PAH"
 American Heart Association International Conference, Nov 2019
 Philadelphia, USA
- "Methamphetamine Associated Pulmonary Arterial Hypertension"
 Mid-Atlantic PH Conference, Feb 2021
 Virtual
- "Methamphetamine Associated Pulmonary Arterial Hypertension" UCLA-Stanford Symposium, Oct 2021 Los Angeles, CA
- "Prescription Amphetamine-Based Stimulants and the Risk of Pulmonary Hypertension" Minnesota PH Consortium, June 2021 Virtual
- "Patients with Group 2 PH are not candidates for interatrial shunts!" CRF THT Conference, Feb 2022 New York, NY
- "Methamphetamine Associated Pulmonary Arterial Hypertension" American College of Cardiology, April 2022

Washington DC

H. Prior and Current Mentees

Name	Year	Current Position
Francois Haddad, MD	2006-2008	Assistant Clinical Professor of Medicine Division of Cardiovascular Medicine Stanford University
Kristina Kudelko, MD	2008-2009	Assistant Clinical Professor of Medicine Division of Pulmonary & Critical Care Medicine Stanford University
David Poch, MD	2009-2010	Assistant Clinical Professor of Medicine Division of Pulmonary & Critical Care Medicine University of California, San Diego
Shigeki Saito, MD	2010-2011	Assistant Professor of Medicine Division of Pulmonary & Critical Care Medicine Tulane University
Lana Melendres-Groves, MD	2011-2012	Assistant Professor of Medicine Division of Pulmonary & Critical Care Medicine University of New Mexico
Nathan Brunner, MD	2012-2013	Assistant Professor of Medicine Division of Cardiology University of British Columbia, Vancouver.
Krithika Ramachandran, MD	2012-2013	Pulmonary & Critical Care Medicine Washington
Mona Selej, MD	2013-2014	Group Medical Director Actelion Pharmaceuticals
Olga Fortenko, MD	2012-2014	Pulmonary & Critical Care Medicine Sequoia Hospital
Jennifer Hellawell, MD	2014-2015	Associate Medical Director Gilead Pharmaceuticals
Cyrus Kholdani, MD	2015-2016	Assistant Professor of Medicine Director, Pulmonary Vascular Disease Program Beth Israel Deaconess Medical Center
Richard Wells, MD	2015-2016	Assistant Professor Pulmonary and Critical care Medicine Division of Pulmonary, Critical Care and Sleep Medicine University of Mississippi Medical Center
Erin Stewart, MD, MS	2014-2018	Senior Instructor Department of Medicine/Anesthesia University of Colorado Hospital
Andrew Sweatt, MD*	2014-present	Instructor

Name	Year	Current Position	
		Division of Pulmonary & Critical Care Medicine Stanford University Medical Center	
Ali Khan, MD	2016-2017	Assistant Professor Department of Medicine, Division of Pulmonary and Critical Care Medicine Rush University Medical Center	
Karla Cruz, MD	2017-2018	Pulmonary & Critical Care Faculty Pulmonary Hypertension Program Director Palmetto Health Medical Group University of South Carolina	
Katrina Lam, MD	2017-2018	Pulmonary, Critical Care, and Pulmonary Hypertension Physician Kaiser Roseville and Sacramento	
Ramon Ramirez, MD	2018 - present	Fellow Division of Pulmonary & Critical Care Medicine Stanford University Medical Center	
Ryan Anderson, MD	2018 - 2020	East Bay Regional Critical Care and Pulmonary Medicine, Sutter Alta Bates in Oakland	
Roberto Bernardo, MD	2019 - 2020	Assistant Professor, Medicine Division of Pulmonary & Critical Care Medicine University of Oklahoma	
Erica Altschul, MD	2020 - 2021	Director of Adult Pulmonary Hypertension Northwell Health Lenox Hill Hospital	
Raquel Lynn, MD	2020 - present	Fellow Division of Pulmonary & Critical Care Medicine Stanford University Medical Center	
Christopher Thomas, MD	2020 - 2021	Pulmonary & Critical Care Medicine Advanced Lung Disease Program Inova Fairfax Hospital	
Vlad Glinskii, MD	2020 - 2021	Kaiser Permanente, Walnut Creek Pulmonary & Critical Care Medicine	
Noura Alturaif, MD	2021 – present	eBay Pulmonary Vascular Disease Fellow Division of Pulmonary & Critical Care Medicine Stanford University Medical Center	

^{*}Primary Mentor for K23 (start date 08/2020)