

November 4, 2015

**CURRICULUM VITAE**  
**JAMES R. KLINGER**

PERSONAL INFORMATION

Business Address 1: Division of Pulmonary, Sleep, and Critical Care Medicine  
Rhode Island Hospital  
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Providence, RI 02903.  
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EDUCATION

Undergraduate: University of Wisconsin, Milwaukee, WI  
Major: Medical Science, B.A., 1980  
Target MD – Three Year Premed Program  
Dean's List - 1977  
Phi Sigma Epsilon - National Freshman Honor Society, 1977  
Phi Kappa Phi - National Honor Society, 1979  
Medical School: Medical College of Wisconsin, Milwaukee, WI  
M.D. May, 1983  
Honors Research Program  
Treasurer - American Medical Student Association, 1982  
Chairman- Task Force on Occupational Health, 1981-1983

POST GRADUATE TRAINING

Residency: Medical College of Pennsylvania, 3900 Henry Ave.,  
Philadelphia, PA, Internal Medicine, 1983-1986  
Chief Medical Resident, 1986-1987  
Fellowship: Rhode Island Hospital and Brown University School of  
Medicine, Providence, RI, Pulmonary and Critical Care  
Medicine, 1987-1991

POST GRADUATE HONORS AND AWARDS

Medical Research Grant, Rhode Island Foundation, 1988  
National Research Service Award, National Institutes of Health, 1989  
Research Fellowship, American Heart Association-RI Affiliate, 1989  
Brown Medical School, Department of Medicine, Beckwith Family Award for Outstanding  
Teaching - 2006  
Consumers' Research Council of America. "Guide to America's Top Physicians" 2006  
Global Directory of Who's Who "Top Doctors" 2007-2011  
Best Doctors in America 2007-2011  
Cambridge Who's Who -2010  
Worldwide Who's Who - 2012

## PROFESSIONAL LICENSES

Medical Physician and Surgeon, Commonwealth of Pennsylvania, 1986-1992  
Medical License, State of Rhode Island, 1991-Present

## BOARD CERTIFICATIONS

National Board of Medical Examiners, 1984  
American Board of Internal Medicine, Internal Medicine, 1986-present  
American Board of Internal Medicine, Pulmonary Medicine, 1990-2020  
Recertification: 2000, 2010  
American Board of Internal Medicine, Critical Care Medicine, 1993- 2023  
Recertification: 2000, 2010

## ACADEMIC APPOINTMENTS

Clinical Instructor of Medicine, Medical College of Pennsylvania, 1986-1987  
Fellow, Pulmonary and Critical Care Medicine, Brown University School of Medicine, 1987-91  
Assistant Professor of Medicine, Brown University School of Medicine, 1992-2002  
Associate Professor of Medicine, Alpert Medical School of Brown University, 2002-2012  
Professor of Medicine, Alpert Medical School of Brown University, 2012-present

## HOSPITAL APPOINTMENTS

Assistant Physician-Department of Medicine, Rhode Island Hospital, 1991-1992  
Staff Physician - Department of Medicine, Rhode Island Hospital, 1992-present  
Assistant Director - Medical Intensive Care Unit, Rhode Island Hospital, 1995-present  
Board Member – University Medicine Foundation 2003-2009  
Staff Physician – Veterans Administration Medical Center, Providence, RI, 2001-2002  
Medical Director – Respiratory Care Unit, Rhode Island Hospital, 2002-2010  
Medical Director – Respiratory Therapy Department, Rhode Island Hospital, 2002-2010  
Medical Director – Rhode Island Hospital Pulmonary Hypertension Center 2002-present

## HOSPITAL COMMITTEES

Committee on Protection of Human Subjects, Rhode Island Hospital, 1995-2001  
Search Committee for Medical Intensivist, Rhode Island Hospital, 1998-1999  
Search Committee for Basic Scientist, VA Medical Center, Providence, RI, 1998-1999.  
Search Committee for Post-doc, VAMC, Providence, RI, 2001-2002.  
Operative and Invasive Procedures Committee, VAMC, Providence, RI 2001-2002.  
Internal Review Board, VAMC, Providence, RI, 2001-2002.  
Search Committee for Directory of Pulmonary Research, Rhode Island Hospital, 2002.  
Search Committee for Chief – Division of Pulmonary and Critical Care Medicine, Veterans Affairs Medical Center, Providence, RI.  
Chairperson – Inquiry Committee, Misconduct in Research, 2008 Rhode Island Hospital.  
Task force on Clinical Trials, 2008 Rhode Island Hospital.  
Committee on Physician Communication – 2008 Rhode Island Hospital.  
Electronic Medical Records Executive Advisory Committee – University Medicine 2010-2011.  
Search Committee for Cardiothoracic Surgeon, Lifespan, 2010-2012.

## MEMBERSHIPS IN SOCIETIES

American Association for the Advancement of Science, member 1989  
American Thoracic Society, member 1989  
American College of Chest Physicians, 1989, Fellow 1993  
American Heart Association 1990  
American Physiological Society, member 1991  
Society of Critical Care Medicine, member 1996  
Pulmonary Hypertension Association 2006  
Pulmonary Vascular Research Institute 2009, Fellow 2009

## STUDY SECTIONS AND REVIEW PANELS

Study Section, Northeast Research Consortium, American Heart Association 1998-2003.  
Grant Reviewer, Florida Department of Health, Biomedical Research Grants 2001-2003.  
National Heart, Lung, and Blood Institute, Special Emphasis Panel, (RFP-NIH-NHLBI-HB-06-06. "Phase II/III trial of Sildenafil for Sickle Cell Disease–Associated Pulmonary Hypertension-Clinical Sites " ZHL1-CCT-D-C2, March 7-8, 2006  
American College of Chest Physicians Chest Foundation Glaxo-Smith-Kline Distinguished Scholar in Thrombosis Review Committee.  
Member 2009-2010.  
Chair 2011-2013  
NIH/NHLBI: Special Emphasis Panel, RFA HL-11-032  
Utilization of Human Lung Tissue Resource for Vascular Research (R03)  
February 28, 2012  
NIH/NHLBI: Special Emphasis Panel, ZHL1 CCT-I C7 1  
Lung Tissue Research Consortium (LTRC) Clinical Center (CC) May 5, 2015

## OTHER APPOINTMENTS

American Thoracic Society, Pulmonary Circulation Assembly Program Committee.  
Member 1996-2011.  
Chair 2012-2013  
Committee on Pulmonary Artery Catheterization and Clinical Outcomes  
Joint committee of NHLBI and Center for Devices and Radiological Health-FDA, 1997.  
Abstract Reviewer, American College of Chest Physicians, 1998-present.  
European Society of Cardiology Working Group on Pulmonary Circulation and Right Ventricular Function, Task Force: Guidelines on Management of Primary Pulmonary Hypertension. Nice, France, July 5-6, 2000.  
American Thoracic Society – Writing committee, Position paper on inhaled nitric oxide in adult lung disease, 2001.  
Membership Committee, American Thoracic Society. 2002-2003.  
Cardiovascular Medical Research and Education Fund Peer Review Meeting  
Chicago, IL, October 12-13, 2005.  
President – Rhode Island Thoracic Society. 2007

American College of Chest Physicians Pulmonary Vascular Disease NetWork Steering Committee	
Member	2007-2009.
Vice Chair	2009-2011
Chair	2011-2013
American Society of Hematology, Workshop on Thrombosis Surveillance. Washington DC,	June 12, 2008.
Research Advocacy Committee – American Thoracic Society.	2011-2012.
Program Review Sub-committee – American Thoracic Society.	2011-2012.
Executive Committee - Council of Networks	
American College of Chest Physicians.	2011-present.
PC Executive Committee – Pulmonary Circulation Assembly	
American Thoracic Society.	2011-present
Scientific Leadership Council - Pulmonary Hypertension Association.	2012-2014
Technical Expert Panel Agency for Healthcare Research and Quality	
Duke University evidence report " <i>Pulmonary Arterial Hypertension: Screening, Management and Treatment</i> ".	2012
Fellow Scholarship Committee - Pulmonary Hypertension Association Conference.	2011
Program Committee, Chest 2012, American College of Chest Physicians.	2011-2012.
Review Committee, CHEST Foundation Clinical Research	
Award in Pulmonary Arterial Hypertension	
Member	2012
Chair	2014,2015
Panel for developing Evidence-Based Clinical Practice Guidelines for Pulmonary Arterial Hypertension: American College of Chest Physicians,	2012-present.
ATS 2013 Core Curriculum Working Group	2012
Advisory Board, ATS Research Newsletter	2012
Scientific Program Committee CHEST 2013	2012
ACCP's Professional Representative Educational Program, faculty member	2013
Chair - Grant Writing Committee, Pulmonary Hypertension Association	2014
Steering Committee – PHOCUS – AACP/France Foundation National Program	
for educating physicians on pulmonary arterial hypertension	2015
Steering Committee – RESPITE study – Phase IIIb, multicenter, international study	
of riociguat in the treatment of pulmonary arterial hypertension	2015

#### MANUSCRIPT REVIEWER

*American Journal of Cardiology*

*American Journal of Pathology*

*American Journal of Physiology: Lung Cellular and Molecular Physiology*

*American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*

*American Journal of Respiratory Cell and Molecular Biology*

*American Journal of Respiratory and Critical Care Medicine*

*Annals of the American Thoracic Society*

*Apoptosis*  
*Chest*  
*Circulation*  
*Circulation Research*  
*Clinical Science*  
*European Journal of Clinical Microbiology & Infectious Diseases*  
*European Respiratory Journal*  
*Expert Opinion on Emerging Drugs*  
*Expert Opinion on Pharmacotherapy*  
*Future Cardiology*  
*Hypertension*  
*Journal of Applied Physiology*  
*Journal of Cellular and Molecular Medicine*  
*Journal of Cellular Physiology*  
*Journal of Molecular Medicine*  
*Journal of Pediatric Hematology and Oncology*  
*Lung*  
*Pediatric Research*  
*PLoS ONE*  
*Pulmonary Circulation*  
*Regulatory Peptides*  
*The Journal of Critical Illness*  
*Thorax*

#### EDITORIAL BOARDS

Associate Editor – Lung – 2006 to present  
Editorial Board – Pulmonary Circulation – 2010 to present  
Editorial Board – Annals ATS – 2014 to present  
American Thoracic Society Research News Quarterly – Advisory Board Member  
Current Hypertension Reports –Section Editor -2014 to present

#### MODERATOR/SESSION CHAIR

ARDS: characterization of sequelae. American College of Chest Physicians, 61st Annual Scientific Assembly, New York, NY, October, 1995, Slide Session,.

American College of Chest Physicians, 63rd Annual Scientific Assembly, New Orleans, LA. October, 1997, Slide Session, Pulmonary Hypertension.

American Thoracic Society, International Conference, Chicago, 1998. Chair: Use of Gene-Targeted Animal Models to Study Pulmonary Vascular Biology.

American College of Chest Physicians, 65th Annual Scientific Assembly, Chicago, IL, November 2, 1999, Slide Session, Pulmonary Hypertension.

American Thoracic Society, International Conference, May 5, 2000, Toronto, CA, Chair: Post-Graduate Seminar, Inhaled Nitric Oxide Therapy.

Society of Critical Care Medicine - Annual meeting, Feb 13, 2001, San Francisco, CA, Co-chair, Sandwich Session: Mechanical Ventilation.

Society of Critical Care Medicine - Annual meeting, Jan 29, 2002, San Diego, CA, Panel Discussion. How I ventilate the patient with ARDS.

Program Co-Director, Annual Symposium on Pulmonary Hypertension, Tufts University School of Medicine, New England Medical Center, Boston, MA, January 23, 2003.

American Thoracic Society, International Conference, May 25, 2003, Orlando, FL, Chair: Symposium: "Sildenafil, Nitric Oxide and BNP: The Role of cGMP in Emerging Therapies for Pulmonary Arterial Hypertension.

American Thoracic Society, International Conference, May, 2006, San Diego, CA, Co-Chair: Symposium: Regenerating the lung circulation in pulmonary arterial hypertension: more than a pipe dream.

American Thoracic Society, International Conference, May, 2007, San Francisco, CA, Co-Chair: Symposium: Pulmonary Hypertension in COPD.

American Thoracic Society, International Conference, May, 2007, San Francisco, CA, Co-Chair. Circulating Stem Cells for the Lung: Therapeutic Implications For Chronic Lung Diseases.

American College of Chest Physicians International Conference, October 2008, Philadelphia, PA. Symposium Chair. Pulmonary Vascular Complications of Pregnancy.

American Thoracic Society, International Conference, May 2009, San Diego, CA. Co-chair. Post graduate course on Diagnosis and Treatment of Pulmonary Hypertension.

American Thoracic Society, International Conference, May 2009, San Diego, CA Co-chair: Minisymposium, The Right Ventricle in Critical Illness.

Pulmonary Vascular Research Institute, 4th Annual General Meeting, January 13, 2010, Lisbon, Portugal. Moderator and organizer: The cyclic GMP signaling pathway has served us well but is now exhausted as a therapeutic target for the treatment of PAH.

PAH Physician Forum: From Pathology to Practice. May 1, 2010, Providence, RI. Co-Chair and organizer.

American Thoracic Society, International Conference, May 18, 2010. Facilitator Thematic Poster Session, Pulmonary Arterial Hypertension: Biomarkers, genetics and genomics: insights into pathogenesis. New Orleans, LA.

American Thoracic Society, International Conference, May 14, 2011, Denver, CO. Co-chair. Post graduate course on Pulmonary Arterial Hypertension.

American Thoracic Society, International Conference, May 16, 2011, Denver, CO. Lead Facilitator, Thematic Poster Session, Pulmonary Hypertension: Experimental Models I.

American Thoracic Society, International Conference, May 17, 2011. Denver, CO.  
Organizer and Co-chair, Scientific Symposium. Hypoxic Pulmonary Hypertension – A half-century of discovery. Denver, CO.

5th International cGMP Conference, Halle, Germany, June 24, 2011. Co-chair: cGMP and Lung.

American College of Chest Physicians International Conference, October 24, 2011, Honolulu, HA. Chair: Panel Discussion: Modern Approach to the Treatment of Pulmonary Arterial Hypertension.

American College of Chest Physicians International Conference, October 24, 2011, Honolulu, HA. Chair: Panel Discussion: Unsettled Questions in Pulmonary Hypertension.

American College of Chest Physicians International Conference, October 25, 2011, Honolulu, HA. Chair: Morning Educational Symposium - Current Issues in Pulmonary Hypertension.

American Thoracic Society International Conference, May 19, 2012, San Francisco, CA. Co-Chair: Post Graduate Course, Update on Venous Thromboembolism.

American Thoracic Society International Conference, May 22, 2012, San Francisco, CA. Co-Chair: Mini Symposium, Bone Marrow and Microparticles in the Pathogenesis of Pulmonary Arterial Hypertension.

American College of Chest Physicians International Conference, October 21, 2012, Atlanta, GA. Chair: Understanding the Right Ventricle

American College of Chest Physicians International Conference, October 21, 2012, Atlanta, GA. Chair: Pulmonary Hypertension: From Bench to Bedside

6<sup>th</sup> Pulmonary Vascular Research Institute Workshop and Debates, January 23, 2013, Istanbul, Turkey. Co-chair: Pulmonary Hypertension Registries and Databases.

American Thoracic Society International Conference, May 18, 2013, Philadelphia, PA. Co-chair, post graduate course: Pulmonary Hypertension: From Bench To Bedside.

American Thoracic Society International Conference, May 19, 2013, Philadelphia, PA. Co-chair, The Role of microRNAs in Pulmonary Vascular Disease.

Classification of Pulmonary Hypertension. American Thoracic Society International Conference. Educational Symposium May 19, 2013, Philadelphia, PA. Chair: Improving the Diagnosis and Treatment of Pulmonary Arterial Hypertension.

CHEST 2013 -. American College of Chest Physicians International Conference. October 27, 2013. Chicago, IL. Evaluation and Treatment of Right-Sided Heart Function in Pulmonary Vascular Disease.

CHEST World Congress, March 21-24, 2014, Poster Facilitator: Pulmonary Vascular Case Report Posters

American Thoracic Society International Conference, May 19, 2014, San Diego, CA. Co-chair, Novel Therapeutic Targets In Pulmonary Hypertension: Insights From Translational And Preclinical Studies.

American Thoracic Society International Conference, May 19, 2015, Denver, CO. Poster Facilitator.

CHEST 2015 - American College of Chest Physicians International Conference. October 27, 2015. Symposium Chair: Current Management of Pulmonary Arterial Hypertension



## ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. **Klinger JR**, Moalli R, Warburton RR, Wrenn DS, and Hill NS. C-receptor ligand blocks pulmonary clearance of atrial natriuretic peptide in isolated rat lungs. *Proc Soc Exp Biol Med* 201:154-158, 1992.
2. **Klinger JR**, Bensadoun E, and Corrao WM. Pulmonary complications from alveolar accumulation of carbonaceous material in a cocaine smoker. *Chest* 101:1171-1173, 1992.
3. **Klinger JR**, Petit RD, Curtin LA, Warburton RR, Wrenn DS, Steinhilper ME, Field LJ, and Hill NS. Cardiopulmonary responses to chronic hypoxia in transgenic mice that overexpress atrial natriuretic peptide. *J Appl Physiol* 75:198-205, 1993.
4. **Klinger JR**, Petit RD, Warburton RR, Wrenn DS, and Hill NS. Neutral endopeptidase inhibition attenuates the development of hypoxic pulmonary hypertension in rats. *J Appl Physiol* 75:1615-1623, 1993.
5. Hill NS, **Klinger JR**, Warburton RR, Pietras L, Wrenn DS. Brain natriuretic peptide: Possible role in the modulation of hypoxic pulmonary hypertension. *Am J Physiol* 266:L308-L315, 1994.
6. **Klinger JR**, Arnal F, Warburton RR, Ou L-C, and Hill NS. Down-regulation of pulmonary atrial natriuretic peptide receptors in rats exposed to chronic hypoxia. *J Appl Physiol* 77:1309-1316, 1994.
7. Brem AS, Bina RV, **Klinger JR**, Pietras L, King T, and Werner JC. Glucocorticoid metabolism in the newborn rat heart. *Proc Soc Exp Biol Med* 209:146-151, 1995.
8. Muramatsu M, Tyler RC, Gutkowska J, **Klinger JR**, Hill NS, Rodman DM, and McMurtry IF. Atrial natriuretic peptide activity accounts for increased cGMP in hypoxia-induced hypertensive rat lungs. *Am J Physiol* 272:L1126-1132, 1997.
9. **Klinger JR**, Wrenn DS, Warburton RR, Petit RD, Pietras L, Ou L-C, and Hill NS. Atrial natriuretic peptide expression in rats with different pulmonary hypertensive responses to hypoxia. *Am J Physiol* 273:H411-417, 1997.
10. Colice GL, Hill NS, Lee Y-J, Du H, **Klinger JR**, Leiter, and Ou L-C. Exaggerated pulmonary hypertensive response to monocrotaline in rats susceptible to chronic mountain sickness. *J Appl Physiol* 83:25-31, 1997.
11. Hill NS, Warburton RR, Pietras L, **Klinger JR**. Nonspecific endothelin receptor antagonist blunts monocrotaline-induced pulmonary hypertension in rats. *J Appl Physiol* 83:1209-1215, 1997.
12. **Klinger JR**, Warburton RR, Pietras L, and Hill NS. Brain natriuretic peptide attenuates the development of pulmonary hypertension in hypoxia-adapted rats. *J Appl Physiol* 84:1646-1652, 1998.
13. **Klinger JR**, Curtin L, Durkin M, Sanchez M, and Matyas B. Multiple cases of life-threatening adenovirus pneumonia in a mental health care center. *Am J Respir Crit Care Med* 157:645-649, 1998.

14. **Klinger JR**, Siddiq FM, Swift RA, Jackson C, Pietras L, Warburton RR, and Hill NS. Plasma C-type natriuretic peptide levels are increased in rats exposed to chronic hypoxia. *Am J Physiol* 275:L645-L652, 1998.
15. **Klinger JR**, Warburton R, Pietras L, Swift, R, John S, Smithies O, and Hill NS. Genetic disruption of atrial natriuretic peptide causes pulmonary hypertension in normoxic and hypoxic mice. *Am J Physiol* 276:L868-874, 1999.
16. Salameh G, Karamsetty, MR, Warburton RR, **Klinger, JR**, Ou L-C, Hill NS. Differences in acute hypoxic pulmonary vasoresponsiveness between rat strains: role of endothelium. *J Appl Physiol* 87:356-362, 1999.
17. Mehta, S, Nelson DL, **Klinger JR**, Buczko GB, Levy M. Prediction of post-extubation work of breathing. *Crit Care Med* 28:1341-1346, 2000.
18. Karamsetty MR, Nakashima M, Ou L-C, **Klinger JR**, Hill NS. EDHF contributes to strain-related differences in pulmonary arterial relaxation in rats. *Am J Physiol* 280:L458-L464, 2001.
19. Karamsetty MR, , **Klinger JR**, Hill NS. Phytoestrogens restore nitric oxide mediated relaxation in pulmonary arteries of chronically hypoxic rats in vitro. *J Pharmacol Exp Ther* 297:968-974, 2001.
20. Preston, IR, **Klinger JR**, Landzberg MJ, Houtchens J, Neslon D, and Hill NS. Vasoresponsiveness of pulmonary hypertension associated with sarcoidosis. *Chest* 120:866-872, 2001.
21. Mehta S, Short K, Schwartz, W, Nelson D, Levy M, Hill NS, Simms HH, **Klinger JR**. A controlled trial of inhaled nitric oxide in patients with the acute respiratory distress syndrome *J Appl Research* 1:73-84, 2001.
22. **Klinger, JR**, Pietras L, Warburton R, Hill NS. Reduced oxygen tension increases atrial natriuretic peptide synthesis and release from atrial cardiac myocytes. *Exp Biol Med* 226:847-853, 2001.
23. Karamsetty, M, **Klinger JR**, Ou L-C, Pietras L, Jackson C, Hill NS. The role of endothelin-1 in strain-related susceptibility to develop hypoxic pulmonary hypertension in rats. *Respir Physiol* 128:219-227, 2001.
24. **Klinger JR**, Warburton R, Pietras L, Oliver P, Fox J, Smithies O, and Hill NS. Targeted disruption of the gene for natriuretic peptide receptor-A worsens hypoxia-induced cardiac hypertrophy *Amer J Physiol* 282:H58-H65, 2002.
25. Preston IR, **Klinger JR**, Mehta S, and Hill NS. Pulmonary edema in scleroderma patients given inhaled nitric oxide. *Chest* 121:656, 2002.
26. Ward NS, Lin DY, Nelson DL, Houtchens J, Schwartz WA, **Klinger JR**, Hill NS, and Levy MM. successful determination of lower inflection point and maximal compliance in a population of patients with acute respiratory distress syndrome. *Crit Care Med*. 30:963-968, 2002.
27. Karamsetty, M, **Klinger JR**, Hill NS. Evidence for the role of p38 MAP kinase in hypoxia-induced pulmonary vasoconstriction. *Am J Physiol* 283:L859-L866, 2002.

28. Preston IR, Hill NS, Gambardella LS, Warburton RR, **Klinger JR**. Synergistic effects of ANP and sildenafil on cGMP levels and amelioration of acute hypoxic pulmonary hypertension. *Exp Biol Med.* 2;229:920-5, 2004.
29. Preston IR, **Klinger JR**, Houtchens J, Nelson D, Farber HW, Hill NS. Acute and chronic effects of sildenafil in patients with pulmonary arterial hypertension. *Respir Med.* 99:1501-10, 2005.
30. **Klinger JR**, Houtchens J, Thaker S, Hill NS, Farber H. Acute cardiopulmonary hemodynamic effects of brain natriuretic peptide in patients with pulmonary arterial hypertension. *Chest.* 128:618S-619S, 2005.
31. **Klinger JR**, Warburton R, Carino GP, Murray J, Murphy C, Napier M, Harrington EO. Natriuretic peptides differentially attenuate thrombin-induced barrier dysfunction in pulmonary microvascular endothelial cells. *Exp Cell Res.* 312:401-10, 2006.
32. Martin KB, **Klinger JR**, Rounds SI. Pulmonary arterial hypertension: new insights and new hope. *Respirology.* 11:6-17, 2006.
33. **Klinger JR**, Thaker S, Houtchens J, Preston IR, Hill NS, Farber HW. Pulmonary hemodynamic responses to brain natriuretic peptide and sildenafil in patients with pulmonary arterial hypertension. *Chest.* 129:417-25, 2006.
34. Steiner MK, Preston IR, **Klinger JR**, Criner GJ, Waxman AB, Farber HW, Hill NS. Conversion to bosentan from prostacyclin infusion therapy in pulmonary arterial hypertension: a pilot study. *Chest.* 130:1471-80. 2006
35. **Klinger JR**, Murray JD, Casserly B, Alvarez DF, King JA, An SS, Choudhary G, Owusu-Sarfo AN, Warburton R, Harrington EO. Rottlerin causes pulmonary edema in vivo: a possible role for PKC $\{\delta\}$ . *J Appl Physiol.* 103:2084-94, 2007.
36. Aliotta JM, Keaney PJ, Warburton RR, DelTatto M, Dooner MS, Passero MA, Quesenberry PJ, **Klinger JR**. Marrow cell infusion attenuates vascular remodeling in a murine model of monocrotaline-induced pulmonary hypertension. *Stem Cells Dev.* 18:773-82, 2009.
37. Mehta S, Heffer MJ, Maham N, Nelson DL, **Klinger JR**, Levy MM. Impact of endotracheal tube size on preextubation respiratory variables. *J Crit Care.* 25:483-8, 2010.
38. Casserly B, Pietras L, Schuyler J, Wang R, Hill NS, **Klinger JR**. Cardiac atria are the primary source of ANP release in hypoxia-adapted rats. *Life Sci.* 87:382-389, 2010.
39. Casserly B, Atalay MK, Poppas A, **Klinger JR**, Abu-Hijleh M. An unusual cause of chest pain. *Thorax* 66:285-6, 313-4, 2011.
40. Choudhary G, Troncales F, Martin D, Harrington EO, **Klinger JR**. Bosentan Attenuates Right Ventricular Hypertrophy and Fibrosis in Normobaric Hypoxia Model of Pulmonary Hypertension. *J Heart Lung Transplant.* 30:827-33, 2011.
41. Stone AC, Machan JT, Mazer J, Casserly B, **Klinger JR**. Echocardiographic Evidence of Pulmonary Hypertension is Associated with Increased One Year Mortality in Patients Admitted with Chronic Obstructive Pulmonary Disease. *Lung.* 189:207-12, 2011.

42. **Klinger JR**, Oudiz RJ, Spence R, Despain D, Dufton C. Long-term pulmonary hemodynamic effects of ambrisentan in pulmonary arterial hypertension. *Am J Cardiol*. 108:302-307, 2011.
43. Casserly B, Mazer JM, Vang A, Harrington EO, **Klinger JR**, Rounds S, Choudhary G. C-type natriuretic peptide does not attenuate the development of pulmonary hypertension caused by hypoxia and VEGF receptor blockade. *Life Sci*. 89:460-466, 2011.
44. Fayngersh V, Drakopanagiotakis F, Dennis McCool F, **Klinger JR**. Pulmonary Hypertension in a Stable Community-Based COPD Population. *Lung*. 189:377-382, 2011.
45. Gartman EJ, Blundin M, **Klinger JR**, Yammine J, Roberts MB, Dennis McCool F. Initial risk assessment for pulmonary hypertension in patients with COPD. *Lung*. 190:83-9, 2012.
46. Sears EH, Aliotta JM, **Klinger JR**. Partial anomalous pulmonary venous return presenting with adult-onset pulmonary hypertension. *Pulm Circ*. 2:250-5, 2012.
47. Lutz K, Wilton K, Zytaruk N, Julien L, Hall R, Harvey J, Skrobik Y, Vlahakis N, Meade L, Matte A, Meade M, Burns K, Albert M, Cash BB, Vallance S, **Klinger J**, Heels-Ansdell D, Cook D; PROTECT Investigators in collaboration with the CCCTG and ANZICS-CTG. Research ethics board approval for an international thromboprophylaxis trial. *J Crit Care*. 27:225-31, 2012.
48. Chichger H, Grinnell KL, Casserly B, Chung CS, Braza J, Lomas-Neira J, Ayala A, Rounds S, **Klinger JR**, Harrington EO. Genetic Disruption of Protein Kinase C $\delta$  (PKC $\delta$ ) Reduces Endotoxin-Induced Lung Injury. *Am J Physiol*. 303:L880-888, 2012.
49. **Klinger JR**, Tsai S-W, Green S, Grinnell K, Harrington EO. Atrial natriuretic peptide attenuates agonist induced pulmonary edema in mice with targeted disruption of the gene for natriuretic peptide receptor-A. *J Appl Physiol*. 114:307-15, 2013.
50. Aliotta JM, Pereira M, Amaral A, Sorokina A, Igbinoba Z, Hasslinger A, El-Bizri R, Rounds SI, Quesenberry PJ, **Klinger JR**. Induction of pulmonary hypertensive changes by extracellular vesicles from monocrotaline-treated mice. *Cardiovasc Res*. 2013 Aug 8.
51. Ventetuolo CE, Praetgaard A, Palevsky HI, **Klinger JR**, Halpern SD, Kawut SM. Sex and hemodynamics in pulmonary arterial hypertension. *Eur Respir J*. 2013 Aug
52. Katsios C, Donadini M, Meade M, Mehta S, Hall R, Granton J, Kutsogiannis J, Dodek P, Heels-Ansdell D, McIntyre L, Vlahakis N, Muscedere J, Friedrich J, Fowler R, Skrobik Y, Albert M, Cox M, **Klinger J**, Nates J, Bersten A, Doig C, Zytaruk N, Crowther M, Cook DJ. Prediction scores do not correlate with clinically adjudicated categories of pulmonary embolism in critically ill patients. *Can Respir J*. 2013 Sep 30.
53. Kline JA, Hernandez J, Hogg MM, Jones AE, Courtney DM, Kabrhel C, Nordenholz KE, Diercks DB, Rondina MT, **Klinger JR**. Rationale and methodology for a multicentre randomised trial of fibrinolysis for pulmonary embolism that includes quality of life outcomes. *Emerg Med Australia*. 2013 Dec;25(6):515-26.
54. Berman-Rosenzweig E, Arneson C, **Klinger JR**. Effects of dose and age on adverse events associated with tadalafil in the treatment of pulmonary arterial hypertension. *Pulm Circ*. 2014 Mar;4(1):45-52.

55. Ventetuolo CE, Gabler NB, Fritz JS, Smith KA, Palevsky HI, **Klinger JR**, Halpern SD, Kawut SM. Are hemodynamics surrogate end points in pulmonary arterial hypertension? *Circulation*. 2014 Aug 26;130(9):768-75.
56. Taichman DB, Ornelas J, Chung L, **Klinger JR**, Lewis S, Mandel J, Palevsky HI, Rich S, Sood N, Rosenzweig EB, Trow TK, Yung R, Elliott CG, Badesch DB. Pharmacologic therapy for pulmonary arterial hypertension in adults: CHEST guideline and expert panel report. *Chest*. 2014 Aug;146(2):449-75.
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52. Stone AC, **Klinger JR**, Nici L. The IC/TLC Ratio Is A Better Predictor of Right Ventricular Dysfunction and/or Pulmonary Hypertension Than FEV1 in COPD Patients Undergoing Pulmonary Rehabilitation. *Am J Res Crit Care Med* 175:A716, 2007.
53. Stone AC, Poppas A, Levy MM, **Klinger JR**. Central Venous Pressure and Superior Vena Cava Oxygen Saturation in the Evaluation of Pulmonary Embolism with Right Ventricular Dysfunction. *Am J Res Crit Care Med Abstracts Issue*, 175:A1003, 2007.
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55. Houtchens J, **Klinger JR**, Nelson DL. Long term use of inhaled nitric oxide as primary adjunct therapy in patients with pulmonary hypertension. *Am J Respir Crit Care Med* 177:A696, 2008.
56. Aliotta JM, Keaney PJ, Warburton RR, Del Tatto M, Dooner MS, Quesenberry PJ, **Klinger JR**. Marrow cell infusion attenuates vascular remodeling in monocrotaline-induced pulmonary hypertension. *Am J Respir Crit Care Med* 177:A723, 2008.
57. Chen JY, Pezzullo JA, Atalay MK, **Klinger JR**, Mayo-Smith WM. CT morphologic correlation with direct right-heart catheterization for the estimation of pulmonary arterial

- pressures. American Roentgen Ray Society Annual Meeting, April 13-18, 2008 Program and Abstracts, presented April 17
58. **Klinger JR**, Tsai, SW, Doung H, Newton J, Harrington EO. Atrial Natriuretic Peptide Inhibits Thrombin-Induced Pulmonary Endothelial Barrier Dysfunction Via A Non PKG Dependent Pathway. *Am J Respir Crit Care Med* 179, A2234, 2009.
  59. **Klinger JR** for the ARIES Study group. Long-term hemodynamic improvements in pulmonary hypertension with ambrisentan therapy. *Chest Meeting Abstracts* 136: 56S-b, 2009.
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  61. **Klinger JR**, Lu Q, Tsai S-W, Harrington EO. Natriuretic Peptide Receptor-A Mediates ANP Inhibition Of Thrombin-Induced Barrier Dysfunction In Pulmonary Vascular Endothelial Cells *Am J Respir Crit Care Med*. 181:A3422, 2010.
  62. Troncales FD, Martin D, Vang A, Harrington EO, **Klinger JR**, Choudhary G. Inhibition Of Right Ventricular Hypertrophy: Role Of Bosentan And PKC Signaling *Am J Respir Crit Care Med*. 181: A4886, 2010.
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  65. Arneson C, McDevitt S, **Klinger JR**. Tadalafil in Geriatric Patients With Pulmonary Arterial Hypertension. *Chest* 138:367A, 2010
  66. **Klinger JR**, Green S, Grinnell K, Tsai S-W, Harrington EO. Gene-Targeted Disruption Of NPR-A Worsens Agonist-Induced Lung Injury In Mice *Am J Respir Crit Care Med*. 183: A1973, 2011.
  67. Aliotta JM, El-Bizri R, Pereira M, Amaral A, Quesenberry PJ, **Klinger JR**. Microparticles from mice with monocrotaline-induced pulmonary hypertension induce right ventricular hypertrophy and pulmonary vascular remodeling in healthy mice *Am. J. Respir. Crit. Care Med*. 185: A5094, 2012.
  68. **Klinger JR**, Sabrina Green, Tsai S-W, Harrington EO, Natriuretic Peptide Receptor - C Specific Ligand cANF blunts agonist-induced acute lung injury *Am. J. Respir. Crit. Care Med*. 185: A5517, 2012.
  69. Choudhary G, **Klinger JR**, Wu W.-C, Jankowich M. Relationship between lung function and albuminuria: data from the third national health and Nutrition Examination Survey (NHANES III) *Am. J. Respir. Crit. Care Med*. 185: A6042, 2012.



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71. Zytaruk N, Meade M, Mehta S, Hall R, Granton J, Ferguson ND, Freitag A, Muscedere J, Fowler R, Skrobik Y, Jacka M, Marshall J, Lauzier F, Lamontagne F, Turgeon A, Vlahakis N, **Klinger JR**, Devereaux P, Ostermann M, Berwanger O, Khwaja K, Burry L, Freidrich J, Burns KEA, Herridge M, Cooper DJ, Bersten A, Heels-Ansdell D, Cook DJ. Risk factors for pulmonary embolism in medical-surgical ICU patients *Am. J. Respir. Crit. Care Med.* 185: A2359, 2012.
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73. Graham T, Choudhary G, Klinger JR. Activation Of The Soluble Gaunylate Cyclase Pathway Fails To Protect Against Hypoxic Pulmonary Hypertension In Natriuertic Peptide Receptor-A Knockout Mice. *American Journal of Respiratory and Critical Care Medicine*, Volume 187, Issue 9 (May 1, 2013).
74. Aliotta JM, Pereira M, Quesenberry PJ, **Klinger JR**. Comparative analysis of extracellular vesicle-based miRNA isolated from mice with monocrotaline-induced pulmonary hypertension and humans with pulmonary arterial hypertension. *Am. J. Respir. Crit. Care Med.* 185: A5094, 2012.
75. Aliotta JM, Pereira M, Quesenberry PJ, **Klinger JR**. Comparative analysis of extracellular vesicle-based miRNA isolated from mice with monocrotaline-induced pulmonary hypertension and humans with pulmonary arterial hypertension. *Am. J. Respir. Crit. Care Med.* 189: A3359, 2014.
76. Aliotta JM, Pereira M, Quesenberry PJ, **Klinger JR**. Bone Marrow Progenitor Cells From Mice With Monocrotaline-Induced Pulmonary Hypertension Induce Right Ventricular Hypertrophy And Pulmonary Vascular Remodeling In Healthy Mice. *Am. J. Respir. Crit. Care Med.* 189: A4135, 2014.
77. Aliotta JM, Pereira M, Wen S. Quesenberry PJ, **Klinger JR**. Bone Marrow Progenitor Cells From Mice With Monocrotaline-Induced Pulmonary Hypertension Induce Right Ventricular Hypertrophy And Pulmonary Vascular Remodeling In Healthy Mice. *Am. J. Respir. Crit. Care Med.* 189: A5303, 2014.

## INVITED PRESENTATIONS

1. American College of Physicians, Eastern Regional Meeting, Fungal infection in a homosexual patient with thrombocytopenia, Philadelphia, PA, 1986.
2. American College of Chest Physicians - 55<sup>th</sup> Annual Scientific Assembly, Subacute massive pulmonary embolism presenting as persistent orthostatic hypotension, Boston, MA, 1989.
3. American College of Physicians, MKSAP IX Review Course, Pulmonary and Critical Care Section, Tufts University, New England Health Care Center, Boston, MA, July 24, 1992.
4. Medical Grand Rounds: Uses and Misuses of Supplementary Oxygen Therapy, Rhode Island Hospital, 1994.
5. University of Alabama - Birmingham, 6<sup>th</sup> Annual Conference on Vascular Biology of Hypertension Research Symposium, Regulation of cardiac atrial natriuretic peptide synthesis and secretion, Sandestin, FL, 1994.
6. Rhode Island Society For Respiratory Care - Newport Challenge. High Frequency Percussive Ventilation in Acute Respiratory Distress Syndrome. Newport, RI, March, 1995.
7. American College of Chest Physicians, 61st Annual International Scientific Assembly, Inhaled Nitric Oxide in the Treatment of ARDS, New York, NY, November 2, 1995.
8. Medical Grand Rounds: CPC - Esophageal Perforation, Rhode Island Hospital, 1995.
9. Moderator for: ARDS: characterization of sequelae - Slide Session, American College of Chest Physicians, 61st Annual Scientific Assembly, New York, NY, Oct, 1995.
10. Critical Care Update '96, Rhode Island Hospital, Department of Medicine, Surgery and Nursing. Inhaled Nitric Oxide in the Treatment of ARDS, March 6, 1996.
11. Medical Grand Rounds: Septic Shock, Rhode Island Hospital, November, 1996.
12. University of Florence, Update in Critical Care Medicine, Inhaled Nitric Oxide in the Treatment of ARDS, Florence, Italy, December 6, 1996.
13. Medical Grand Rounds-Newport Hospital, Diagnosis and Treatment of Pulmonary Embolism, Newport RI, March 7, 1997.
14. American Thoracic Society - International Conference, Symposium: Novel Signaling Pathways in Pulmonary Vascular Biology, Natriuretic Peptides: Regulators of Pulmonary Vascular Responses to Hypoxia. San Francisco, CA, May 20, 1997.
15. Aspen Lung Conference, Exaggerated pulmonary hypertensive responses during chronic hypoxia in mice with gene-targeted reductions in atrial natriuretic peptide. Aspen, CO June, 1997.
16. Medical Grand Rounds - St. Anne's Hospital, Pulmonary Embolism, Fall River, MA, June 18, 1997.
17. Pulmonary Artery Catheterization and Clinical Outcomes (PACCO), National Heart, Lung, and Blood Institute (NHLBI), NIH and Center for Devices and Radiological Health (CDRH), FDA, Use of the pulmonary artery catheter in pulmonary vascular diseases August 25, 1997.

18. Society of Critical Care Medicine, Controversies in Critical Care, Inhaled Nitric Oxide in Respiratory Failure: Friend of Foe? Boston, MA, September 13, 1997.
19. American College of Chest Physicians, 63rd Annual International Scientific Assembly, New pharmacologic therapies for primary pulmonary hypertension, New Orleans, LA, October 30, 1997.
20. Medical Grand Rounds - Veterans Administration Hospital, The Pulmonary Artery Catheter - Friend or Foe, Providence, RI, November 13, 1997
21. Rhode Island Society For Respiratory Care Annual Convention and Exhibition. ARDS - The Latest in Alternative Modes of Ventilation. Newport, RI, March 4, 1998.
22. Critical Care Update - Rhode Island Hospital. The Pulmonary Artery Catheter in 1998: Where are we now? Providence, RI, May 15, 1998.
23. Rhode Island Critical Care Society. Update on the Pulmonary Artery Catheter: whats new since PACCO? Providence, RI, December 9, 1998.
24. Medical Grand Rounds - Rhode Island Hospital, Functional Stridor, , February 16, 1999.
25. Medical Grand Rounds - Rhode Island Hospital: The Trial of a Medical Malpractice Suit, March 2, 1999.
26. Critical Care Update sponsored by Rhode Island Hospital. Ventilator Strategies in ARDS, Providence, RI, May 14, 1999.
27. Medical Grand Rounds - St. Anne's Hospital, Pulmonary Embolism and DVT, Fall River, MA, September 28, 1999.
28. Society of Critical Care Medicine- Annual meeting, Inhaled Nitric Oxide in ARDS: An Evidence-Based Medicine Approach. Orlando, FL, February 12, 2000.
29. American Thoracic Society, International Conference, Post-Graduate Seminar, Inhaled Nitric Oxide Therapy, Rationale for INO Therapy in Adult Cardiopulmonary Disease, Toronto, CA, May 5<sup>th</sup>, 2000
30. Rhode Island Hospital, Basic Research Seminar Series. ANP inhibits signal transduction of Hypertrophic Stimuli, April 11, 2000.
31. Medical Grand Rounds - Rhode Island Hospital: Role of D-dimer and Helical CT Scan in the Diagnosis of Pulmonary Embolism, May 2, 1999.
32. American Thoracic Society, International Conference, Sunrise Seminar, Use of Low Molecular Weight Heparin for Pulmonary Embolism and DVT, Toronto, CA, May, 2000.
33. Rhode Island Hospital Department of Diagnostic Imaging, Summer Symposium, The work up of Pulmonary Emboli, Providence, RI, June 17, 2000.
34. American College of Chest Physicians. 66<sup>th</sup> Annual International Scientific Assembly, Symposium: ARDS Management: what are our alternatives? San Francisco, CA, October 24, 2000.

35. American College of Chest Physicians. 66<sup>th</sup> Annual International Scientific Assembly, Symposium: Steroids are an effective treatment in late ARDS. San Francisco, CA, October 25, 2000.
36. Society of Critical Care Medicine- Annual meeting, High Frequency Percussive Ventilation in ARDS: San Francisco, CA, February, 2001
37. Medical Grand Rounds, Charleton Memorial Hospital, New Bedford, MA. Contemporary Management of Nosocomial Pneumonia, October 16, 2001
38. Society of Critical Care Medicine- Annual meeting, How I Ventilate the Patient with ARDS:Panel Discussion., San Diego, CA, January 29, 2002.
39. Society of Critical Care Medicine- Annual meeting, ARDS Pathophysiology, San Diego, CA, January 30, 2002.
40. Tufts University/New England Medical Center – Pulmonary Research Conference. The Role of Atrial Natriuretic Peptide in Right Ventricular Hypertrophy, May 29, 2002.
41. American Thoracic Society – Rhode Island Chapter, Annual Meeting. New Treatments for Adult Patients with Pulmonary Arterial Hypertension. Providence, RI, October 4, 2002.
42. Medical Grand Rounds - Update on Pulmonary Hypertension, Rhode Island Hospital, November 12, 2002.
43. First Annual Case Series Investigator Meeting, Scios Corporation – Nesiritide in Pulmonary Arterial Hypertension, Dallas TX, December 8, 2002
44. First Annual Symposium on Pulmonary Hypertension, Tufts University School of Medicine – Emerging Therapies for Pulmonary Hypertension, Boston, MA, January 23, 2003.
45. Rhode Island Society For Respiratory Care Annual Convention and Exhibition. Pulmonary Hypertension – New Challenges in Treatment, March, 2003
46. Update on Therapeutic Approaches to the Heart Failure Patient, Pulmonary Hypertension, Newport, RI, September 6, 2003.
47. Update in Critical Care Medicine, Diagnosing PE in the ICU:D-dimers and CT angiogram, Providence, RI, September 12, 2003.
48. Emerging Therapies For Pulmonary Hypertension, Grand Rounds, Norwich Hospital, Norwich CT, October 14, 2003.
49. Emerging Therapies For Pulmonary Hypertension, Pulmonary Rounds, Danbury Hospital, Danbury, CT, November 13, 2003.
50. Pulmonary Hypertension: Approach to the Surgical Patient, Visiting Professor and Grand Rounds Department of Anesthesiology, Yale University School of Medicine, February 24-25, 2004.
51. Pulmonary Hypertension – Role of Brain Natriuretic Peptide. Loyola School of Medicine, Lung Transplant Program, Chicago, IL, March 18, 2004.

52. Hypoxic Respiratory Failure: what to do when traditional methods fail. 6th Annual Conference in Mechanical Ventilation 2004: New Trends, Tufts/New England Medical Center, Boston, MA, April 29, 2004.
53. Home Nitric Oxide Therapy for Adult Chronic Lung Disease – iNO Therapeutics Scientific Advisory Board Meeting, Woods Hole, MA, September 14, 2004.
54. Pulmonary Hypertension - David H. Spodick, Cardiology Symposium Worcester Medical Center, Worcester, MA, October 7, 2004
55. Pulmonary Hypertension – Medical Grand Rounds, Charleton Memorial Hospital, Fall River, MA, October 19, 2004.
56. Emerging Therapies in Pulmonary Hypertension, brain natriuretic peptide, inhaled nitric oxide and simvastatin. Second Annual Symposium on Pulmonary Hypertension, Tufts University School of Medicine, Boston, MA, November 17, 2004.
57. Update in Treatment of Pulmonary Hypertension Associated with Collagen Vascular Diseases. Rheumatology Grand Rounds. Roger Williams Medical Center, Providence, RI. June 17, 2005.
58. Combination Therapy for Pulmonary Hypertension. Third Annual Update in Pulmonary Hypertension, Tufts University School of Medicine, Tufts – New England Medical Center, Boston, MA, November 18, 2005.
59. Prevention of DVT/PE in Hospitalized Patients. Medical Grand Rounds, Nassau University Medical Center, SUNY Downstate, East Meadow, NY, March 16, 2006.
60. Modern Approach to Pharmacologic Therapy in Patients with Pulmonary Arterial Hypertension. Rhode Island Hospital CME. Update in Diagnosis and Treatment of Pulmonary Arterial Hypertension, Newport, RI, July 28, 2006.
61. Pulmonary Hypertension. American College of Chest Physicians – New England Chapter-Update in Pulmonary, Critical Care, and Sleep Medicine, Newport RI, September 29, 2006.
62. Infusion Therapy. Fourth Annual Update in Pulmonary Hypertension, Tufts University School of Medicine, Tufts – New England Medical Center, Boston, MA, November 17, 2006.
63. Heparin-Induced Thrombocytopenia – Medical Grand Rounds, South Nassau County Hospital, Ocean City, NY, December 5, 2006.
64. Prophylaxis of Deep Vein Thrombosis in the Hospitalized Medical Patient, Medical Grand Rounds, Good Samaritan Hospital, West Islip, NY, March 23, 2007.
65. Pulmonary Hypertension – Cardiology Grand Rounds, Rhode Island Hospital, May 4, 2007.
66. Management of Pulmonary Arterial Hypertension - Medical Grand Rounds, Community Medical Center, Scranton, PA, October 16, 2007
67. Pulmonary Hypertension in COPD – Medical Grand Rounds, The Memorial Hospital, Pawtucket, RI, October 17, 2007

68. Pulmonary Hypertension in COPD – 5<sup>th</sup> Annual Update in Pulmonary Hypertension, Tufts University School of Medicine, Tufts – New England Medical Center, Boston, MA, December 7, 2007.
69. Update in Pulmonary Hypertension - Medical Grand Rounds, Kent County Hospital, Cranston, RI, December 21, 2007.
70. Diagnosis and Treatment of Pulmonary Embolism, Medical Grand Rounds, LandMark Hospital, Woonsocket, RI, February 6, 2008
71. Pulmonary Hypertension in COPD – Pulmonary Rounds, Maine Medical Center, Portland Maine, March 6, 2008.
72. Pulmonary Hypertension in Pregnancy, American College of Chest Physicians international meeting, Philadelphia, PA, October 28, 2008.
73. Pulmonary Hypertension in Obstructive Sleep Apnea, American College of Chest Physicians international meeting, Philadelphia, PA, October 29, 2008.
74. The Right Ventricle in Pulmonary Hypertension - 6<sup>th</sup> Annual Update in Pulmonary Hypertension, Tufts University School of Medicine, Tufts – New England Medical Center, Boston, MA, December 5, 2008.
75. Phosphodiesterase Inhibitors in PAH. Post graduate course, American Thoracic Society international meeting, May 2009
76. The Effect of Sepsis on Right Ventricular Function, American Thoracic Society international meeting, May 2009.
77. Right Ventricular Function in Acute and Chronic Pulmonary Hypertension, Medical Grand Rounds, University of South Alabama, October 8, 2009
78. Role of Natriuretic Peptides in Pulmonary Endothelial Barrier Function – Visiting Professor, Pulmonary Medicine, University of South Alabama.
79. Keynote Speaker - Recent Developments in the Management of Pulmonary Arterial Hypertension, Northshore University Hospital, Manhasset, NY, October 17, 2009.
80. Stem Cell Therapy in Pulmonary Arterial Hypertension. 7<sup>th</sup> Annual Update in Pulmonary Hypertension, Tufts University School of Medicine, Tufts – New England Medical Center, Boston, MA, December 4, 2009.
81. PAH Physician Forum: From Pathology to Practice. Pulmonary Arterial Hypertension Diagnosis and Treatment, Providence RI, May 1, 2010.
82. Fourth Annual Pulmonary Hypertension Symposium: updates on classification and therapies, Yale University. Inhaled prostanoids: iloprost and treprostinil. East Haddam, CT, June 3, 2010.
83. Fourth Annual Pulmonary Hypertension Symposium: updates on classification and therapies, Yale University. Statins, vasointestinal peptide and serotonin antagonists. East Haddam, CT, June 3, 2010.
84. Update on Pulmonary Hypertension, Medical Grand Rounds, Rhode Island Hospital, Providence, RI, June 29, 2010.

85. Pulmonary Hypertension Association 30-City Medical Education Tour. A collaborative approach for clinicians on the front line. Newport, RI June 30, 2010.
86. Therapies for Pulmonary Arterial Hypertension, Update in Pulmonary, Critical Care, and Sleep Medicine. New England States Chapter of the American College of Chest Physicians, Newport, RI, September 24, 2010.
87. Pulmonary hypertension non the echo: Time to treat? Case Studies in Pulmonary Hypertension. American College of Chest Physicians annual scientific meeting. Morning Educational Symposium, Vancouver, CA, November 1, 2010
88. Should I treat this patient's pulmonary hypertension? COPD Associated pulmonary hypertension. American College of Chest Physicians annual scientific meeting. Morning Educational Symposium Vancouver, CA, November 1, 2010
89. Controversies in the management of pulmonary arterial hypertension. Pro/con Debate. Pro: pulmonary vasodilator challenge in an absolute standard of care. American College of Chest Physicians annual scientific meeting. Morning Educational Symposium. . Vancouver, CA, November 2, 2010.
90. Advances in Pulmonary Arterial Hypertension Treatment: November 2010 Findings. CME-certified Video-recorded roundtable discussion online program reporting on key highlights from information presented at the annual CHEST meeting in Vancouver, CA, November 3, 2010.
91. Evolving combination treatments and targets. Combination therapies in pulmonary arterial hypertension. American College of Chest Physicians annual scientific meeting. Pulmonary arterial hypertension therapy.. Vancouver, CA, November 4, 2010.
92. Double Jeopardy: PH and hemodynamic problems. Society of Critical Care Medicine annual international meeting. San Diego, CA, Jan 18, 2011.
93. Idiopathic Pulmonary Hypertension. Post-graduate course. American Thoracic Society annual international meeting, Denver CO, May 13, 2011.
94. Advances in the Management and Treatment of Pulmonary Arterial Hypertension, North Shore University Hospital Grand Rounds, September 30, 2011.
95. Investigational Therapies: what's new and when do I consider using it? American College of Chest Physicians annual scientific meeting. Panel Discussion – Modern Approach to the treatment of Pulmonary Arterial Hypertension. Honolulu, HA, October 24, 2011.
96. Which New Scientific Approaches Hold the Greatest Potential for Becoming Approved Therapies for Pulmonary Hypertension? American College of Chest Physicians annual scientific meeting. Morning Educational Symposium – Current Issues in Pulmonary Hypertension. Honolulu, HA, October 25, 2011.
97. Advances in the Management and Treatment of Pulmonary Arterial Hypertension, Happy Valley Hospital Medical Grand Rounds, Ridgeway, NJ, November 2, 2011.
98. Advances in the Management and Treatment of Pulmonary Arterial Hypertension, North Shore University Hospital, Pulmonary Grand Rounds, Manhasset, NY, November 18, 2011.

99. Treating pulmonary arterial hypertension hospital to home – a patient’s perspective. Rhode Island Association of Respiratory Therapists annual meeting, April 4, 2012 Newport, RI.
100. Diagnosis of Venothromboembolism. Post graduate course, American Thoracic Society International Conference, May 19, 2012, San Francisco, CA.
101. Connective Tissue Disease and Pulmonary Hypertension: a complex disease. Medically Led Sessions, Pulmonary Hypertension Association International PH Conference, June 23, 2012, Orlando, FL.
102. Classification of Pulmonary Hypertension. Morning Educational Symposium. American College of Chest Physicians Annual International Meeting, October 21, 2012
103. COPD-Associated Pulmonary Hypertension. American College of Chest Physicians International Conference, Symposium: Should I Treat This Patient With Pulmonary Hypertension? Case-Based Presentations and Contemporary Management Issues. October 22, 2012, Atlanta, GA.
104. Management of the Decompensated Patient With Pulmonary Hypertension. American College of Chest Physicians International Conference, Symposium: Critical Illness and Pulmonary Hypertension: When a Bad Situation Turns Worse. October 22, 2012, Atlanta, GA.
105. Small Case-Based Interactive Discussions: Pulmonary Hypertension--Getting to the Heart of the Matter. American College of Chest Physicians International Conference, October 23, 2012, Atlanta, GA.
106. Understanding the new Anticoagulants. New York State Thoracic Society Meeting, February 2, 2013, Valhalla, NY.
107. Under Pressure: The Right Ventricle In Health, Exercise, And Disease. Post-graduate course. American Thoracic Society annual international meeting, Philadelphia, PA, May 17, 2013.
108. Classification of Pulmonary Hypertension. American Thoracic Society annual international meeting educational symposium: Improving the Diagnosis and Treatment of Pulmonary Arterial Hypertension. , Philadelphia, PA, May 19, 2013.
109. What Is on the Horizon for PAH? An Overview of Clinical Trials. Pulmonary Hypertension Association Education Forum, Boston, MA June 8, 2013.
110. Evaluation and Treatment of WHO Group III Pulmonary Hypertension. 2013 Midwest Pulmonary Hypertension Symposium. University of Kansas Medical Center, Kansas City, MO, Sept 12, 2013.
111. Current Management of Pulmonary Hypertension. 20th Pulmonary & Critical Care Fellows' Conference. CHEST 2013 -. American College of Chest Physicians International Conference, Chicago, IL. October 26, 2013.
112. Critical Illness and Pulmonary Hypertension: When a Bad Situation Turns Worse. Management of the Decompensated Patient with Pulmonary Arterial Hypertension. CHEST 2013 -. American College of Chest Physicians International Conference, Chicago, IL. October 28, 2013.



- 113.Small Case-Based Discussions. Challenging Pulmonary Hypertension Cases. CHEST 2013 -. American College of Chest Physicians International Conference, Chicago, IL. October 29, 2013.
- 114.Practical Aspects of Diagnosing and Managing Pulmonary Hypertension. CHEST 2013 -. American College of Chest Physicians International Conference, Chicago, IL. October 30, 2013.
- 115.Pulmonary Hypertension: The Now and the Future: Classification, Diagnosis and Prognosis of Pulmonary Arterial Hypertension. CHEST World Congress, March 21-24, 2014, Madrid, Spain.
- 116.NO Signaling Pathway: Portable Gas to Pills. Alfred P. Fishman Symposium on Pulmonary Vascular Disease. Philadelphia, PA. April 26, 2014.
- 117.Treatment strategies using upfront combination therapy and emerging drugs. 9<sup>th</sup> International Pulmonary Hypertension Symposium. Frankfurt, Germany, May 9, 2014
- 118.Between A Rock And A Really, Really Hard Place: Case Studies In The Medical Management Of Acute And Decompensated Right Ventricular Failure In The ICU. American Thoracic Society annual international meeting educational symposium: Improving the Diagnosis and Treatment of Pulmonary Arterial Hypertension, San Diego, CA, May 16, 2014.
119. Update on Pulmonary Hypertension. 21st Pulmonary & Critical Care Fellows' Conference. CHEST 2014 -. American College of Chest Physicians International Conference, Austin, TX October 25, 2014
- 120.Recognition & Evaluation of the Patient with PAH: The need for early diagnosis. CHEST 2014. American College of Chest Physicians International Conference, Austin, TX October 25, 2014.
- 121.NO-cGMP Pathway. 12<sup>th</sup> Annual Update in Pulmonary Hypertension, Tufts University, Boston, MA December 12, 2014.
- 122.Integrating Guidelines and Clinical Trial Evidence Into Optimal Collaborative Care for Patients with PAH. Medical Grand Rounds, Buffalo, NY, February 25, 2015.
- 123.Biomarkers in the Respite Trial. investigating riociguat in PAH patients with insufficient response to PDE-5I. International Academy Of Cardiology Annual Scientific Sessions. 20th World Congress On Heart Disease. Vancouver, BC, Canada, July 25, 2015.
- 124.Update on Pulmonary Hypertension. Eastern Pulmonary Conference, Florida, September 10, 2015
- 125.Management of Acute Pulmonary Embolism. Eastern Pulmonary Conference, Florida, September 10, 2015.
- 126.Update on Treatment of Pulmonary Hypertension. CHEST 2015 - American College of Chest Physicians International Conference, Montreal, CA, October 24, 2015.
- 127.Pulmonary Hypertension inPHOCUS Interactive Summit. CHEST 2015 - American College of Chest Physicians International Conference, Montreal, CA, October 24, 2015
- 128.PDE5 Inhibition versus Soluble GC stimulation – does it matter how the cGMP pathway is targeted? CHEST 2015 - American College of Chest Physicians International Conference, Montreal, CA, October 24, 2015
- 129.Problem based learning 2015: Pharmacological therapy for pulmonary arterial hypertension in adults: CHEST guidelines. CHEST 2015 - American College of Chest Physicians International Conference, Montreal, CA, October 24, 2015

130. STEP – What's new in Pulmonary Hypertension: Combination Therapy for Pulmonary Hypertension. CHEST 2015 - American College of Chest Physicians International Conference, Montreal, CA, October 24, 2015.
131. NO-cGMP Pathway: Have we gotten all we can get? 13<sup>th</sup> Annual Update in Pulmonary Hypertension, Boston, MA December 4, 2015.

## GRANTS AWARDED

1. *Project Title:* Atrial Natriuretic Factor in the Regulation of Hypoxia-Induced Pulmonary Hypertension in Rats  
*Role:* Principal Investigator  
*Sponsoring Agency:* Medical Research Grant, Rhode Island Foundation  
*Period of Support:* 1989  
*Amount of Support:* \$3,000
2. *Project Title:* ANF in the Regulation of Hypoxia-Induced Pulmonary Hypertension  
*Role:* Research Fellow  
*Sponsoring Agency:* National Research Service Award, NHLBI (Frederic G. Hoppin, P.I.)  
*Period of Support:* 1989  
*Amount of Support:* \$25,000
3. *Project Title:* Atrial Natriuretic Factor in the Regulation of Hypoxia-Induced Pulmonary Hypertension  
*Role:* Principle Investigator (Mentor Nicholas S. Hill)  
*Sponsoring Agency:* Research Fellowship, American Heart Association  
*Period of Support:* 1990  
*Amount of Support:* \$25,000
4. *Project Title:* Effects of Stretch and Hypoxia on Atrial Natriuretic Peptide Synthesis  
*Role:* Co-Investigator, (PI Nicholas S. Hill)  
*Sponsoring Agency:* Grant in Aid, American Heart Association  
*Period of Support:* 1993-1994  
*Amount of Support:* \$50,000
5. *Project Title:* Mechanisms of Cardiac Natriuretic Peptide Synthesis  
*Role:* Principal Investigator (Mentor N.S. Hill)  
*Sponsoring Agency:* Clinical Investigator Development Award, NHLBI-NIH  
*Period of Support:* 1994-99  
*Amount of Support:* \$405,620
6. *Project Title:* Role of C-Type Natriuretic Peptide in Regulation of Pulmonary Vascular Tone  
*Role:* Principal Investigator  
*Sponsoring Agency:* Rhode Island Hospital Developmental Grant  
*Period of Support:* 1994-1995  
*Amount of Support:* \$25,000
7. *Project Title:* Inhaled Nitric Oxide in the treatment of ARDS  
*Role:* Principal Investigator  
*Sponsoring Agency:* Investigator Initiated Trial, Pfizer  
*Period of Support:* 1995  
*Amount of Support:* \$2000

8. *Project Title:* Inhaled Nitric Oxide in the treatment of ARDS  
*Role:* Principal Investigator  
*Sponsoring Agency:* Investigator Initiated Trial, Ohmeda, Inc.  
*Period of Support:* 1995-1996  
*Amount of Support:* \$13,000
9. *Project Title:* A Double blind, Randomized, Placebo Controlled Study of Inhaled Nitric Oxide in the treatment of ARDS  
*Role:* Principal Investigator  
*Sponsoring Agency:* Investigator Initiated Trial, Ohmeda, Inc.  
*Period of Support:* 1996-1997  
*Amount of Support:* \$17,000
10. *Project Title:* Modulation of Pulmonary Hypertension by Natriuretic Peptides  
*Role:* Co-Investigator, (PI Nicholas S. Hill)  
*Sponsoring Agency:* Grant in Aid, American Heart Association  
*Period of Support:* 1997-1999  
*Amount of Support:* \$60,000
11. *Project Title:* Natriuretic Peptides and the Lung  
*Role:* Co-investigator, (PI Nicholas S. Hill)  
*Sponsoring Agency:* RO-1, NIH-NHLBI-  
*Period of Support:* 1997-2001  
*Amount of Support:* \$1,536,037
12. *Project Title:* Antithrombin III in Patients with Severe Sepsis  
*Role:* Site Investigator  
*Sponsoring Agency:* Centeon Pharmaceutical  
*Period of Support:* 1999  
*Amount of Support:* \$38,400
13. *Project Title:* Mechanisms of hypoxia-induced ANP secretion in the isolated perfused rat heart  
*Role:* Principal Investigator  
*Sponsoring Agency:* Grant in Aid, American Heart Association  
*Period of Support:* 1999-2001  
*Amount of Support:* \$75,000
14. *Project Title:* A Phase III study to demonstrate the safety and efficacy of recombinant platelet activating-factor acetylhydrolase for reducing 28 day mortality in patients with severe sepsis.  
*Role:* Site Investigator  
*Sponsoring Agency:* ICOS  
*Period of Support:* 2001-2003  
*Amount of Support:* \$80,000

15. *Project Title:* DVT Free, a prospective trial of deep vein thrombosis  
*Role:* Site Investigator  
*Sponsoring Agency:* Aventis, Pharmaceutical  
*Period of Support:* 2001-2002  
*Amount of Support:* \$10,000
16. *Project Title:* The role of atrial natriuretic peptide in right ventricular hypertrophy  
*Role:* Principal Investigator  
*Sponsoring Agency:* Established Investigator Award, American Heart Association  
*Period of Support:* 01/01/02-12/31/05  
*Amount of Support:* \$300,000.
17. *Project Title:* Pulmonary Hemodynamic Effects of Human B-type Natriuretic Peptide Infusion in Patients with Pulmonary Arterial Hypertension  
*Role:* Principal Investigator  
*Sponsoring Agency:* Investigator Initiated Trial, Scios, Inc.  
*Period of Support:* 07/01/02-07/31/03  
*Amount of Support:* \$54,000.
18. *Project Title:* Development of a Hospital-Based Home Program for the Use of Nitric Oxide for Inhalation in the Chronic Management of Severe Cardiopulmonary Diseases  
*Role:* Principal Investigator  
*Sponsoring Agency:* INO Therapeutics Inc.  
*Period of Support:* 08/01/02-8/01/03  
*Amount of Support:* \$46,000.
19. *Project Title:* AIRES –1 –A Phase III, Randomized, Double –Blind, Placebo Controlled , Multicenter, Efficacy Study Of Ambrisentan In Subjects With Pulmonary Arterial Hypertension  
*Role:* Site Investigator  
*Sponsoring Agency:* Phase III Clinical Trial, Myogen, Inc.  
*Period of Support:* 12/01/03-12/31/05.  
*Amount of Support:* \$45,000.
20. *Project Title* Open-Label Clinical Trial for Conversion from Epoprostenol or Treprostinil to Bosentan  
*Role:* Participating Investigator, (PI Nicholas S. Hill)  
*Sponsoring Agency:* New England Medical Center,  
*Period of Support:* 06/01/03-12/31/05.  
*Amount of Support:* \$10,000.
21. *Project Title:* Prospective Trial Of The Conversion From Intravenous Epoprostenol To Subcutaneous Treprostinil  
*Role:* Site Investigator, (Nicholas S. Hill)  
*Sponsoring Agency:* New England Medical Center, United Therapeutics  
*Period of Support:* 12/01/03-12/31/05.

*Amount of Support:* \$10,000.

22. *Project Title:* A Multi-Center, Open Label, 8 Week Evaluation Of Topical/Systmeic Anti-Inflammatory Pre-Treatment Or Catheter Pre-Placement On The InfujSION Site Reaction Associated With Subcutaneous Remodulin Administration.

*Role:* Site Investigator

*Sponsoring Agency:* United Therapeutics

*Period of Support:* 12/01/03-12/31/05.

*Amount of Support:* \$10,000.

23. *Project Title:* Phase II, open-label, multicenter study evaluating ambrisentan in subjects with pulmonary arterial hypertension who have previously discontinued endothelin receptor antagonist therapy due to serum aminotransferase abnormalities.

*Role:* Site Investigator

*Sponsoring Agency:* Myogen,

*Period of Support:* 4/03/05-indefinite.

*Amount of Support:* \$129,300/year.

24. *Project Title:* A Multi-National, Multicenter, Randomized, Double Blind, Placebo Controlled, Parallel Group Study To Assess The Safety And Efficacy Of A Subject Optimized Dose Of Sildenafil Based On Toleration, When Used In Combination With Intravenous Prostacyclin In The Treatment Of Pulmonary Arterial Hypertension

*Role:* Site Investigator

*Sponsoring Agency:* Pfizer

*Period of Support:* 05/16/05- 2008.

*Amount of Support:* \$138,000/yr.

25. *Project Title:* Dose Response of Pulsed Nitric Oxide in Adults with COPD Requiring Long-term Oxygen Therapy Randomized

*Role:* Site Investigator

*Sponsoring Agency:* iNO Therapeutics

*Period of Support:* 07/01/05-6/30/06.

*Amount of Support:* \$145,000/year.

26. *Project Title:* Iloprost Inhalation In Post-Operative Cardiothoracic Patients With Pulmonary Arterial Hypertension

*Role:* Principal Investigator

*Sponsoring Agency:* Investigator Initiated Trial, Cotherix, Inc.

*Period of Support:* 08/01/05-6/30/06.

*Amount of Support:* \$33,951.

27. *Project Title:* A Randomized, Double Blind, Placebo Controlled, Phase III Study Of The Phosphodiesterase Type 5 Inhibitor Taladafil in the Treatment of Patients with Pulmonary Arterial Hypertension.  
*Role:* Site Investigator  
*Sponsoring Agency:* Lilly/ICOS  
*Period of Support:* 11/01/05- 12/31/07.  
*Amount of Support:* \$11,000/patient.
28. *Project Title:* Effects Of Combination Of Bosentan And Sildenafil Versus Sildenafil Monotherapy On Morbidity And Mortality In Symptomatic Patients With Pulmonary Arterial Hypertension – A Multicenter, Double – Blind, Randomized, Placebo – Controlled, Parallel Group, Prospective, Event Driven Phase IV Study  
*Role:* Site Investigator  
*Sponsoring Agency:* Actelion  
*Period of Support:* 02/16/06- 12/31/09.  
*Amount of Support:* \$9,000/patient.
29. *Project Title:* Acute Pulmonary Hemodynamic Effects of Sildenafil and Nesiritide Versus Sildenafil Alone in Adult Patients with Pulmonary Arterial Hypertension  
*Role:* Principal Investigator  
*Sponsoring Agency:* Investigator Initiated Trial, Scios, Inc  
*Period of Support:* 04/01/06-6/30/07.  
*Amount of Support:* \$76,000.
30. *Project Title:* REVEAL Registry (Registry to Evaluate Early And Long-term PAH Disease Management)  
*Role:* Site Investigator  
*Sponsoring Agency:* Actelion Pharmaceutical  
*Period of Support:* 6/20/06 – 5/31/11  
*Amount of Support:* \$76,000
31. *Project Title:* Natriuretic Peptides in Pulmonary Endothelial Barrier Function  
*Role:* Principle Investigator  
*Sponsoring Agency:* NIH-NHLBI HL088328  
*Period of Support:* 5/1/2007-4/31/2012  
*Amount of Support:* \$268,781/year.
32. *Project Title:* Role of Endothelin-induced PKC $\delta$  Activation in Right Ventricular Hypertrophy  
*Role:* Mentor, (PI Gaurav Choudhary)  
*Sponsoring Agency:* Actelion Pharmaceutical  
*Period of Support:* 7/1/2008-6/30/2009  
*Amount of Support:* \$75, 000

33. *Project Title:* ATHENA-1, An Open-label, Multicenter Study of Ambrisentan and a Phosphodiesterase Type-5 Inhibitor Combination Therapy in Subjects with Pulmonary Arterial Hypertension who have Demonstrated a Sub-Optimal Response to a Phosphodiesterase Type-5 Inhibitor  
*Role:* Site Investigator  
*Sponsoring Agency:* Gilead Sciences, Inc  
*Period of Support:* 10/21/08-ongoing  
*Amount of Support:* \$60,000
34. *Project Title:* A Phase 3, Multi-Center, Randomized, Double Blind, Efficacy and Safety Study of Monotherapy Sitaxsentan Sodium versus Combination Therapy with Sitaxsentan Sodium and Sildenafil Citrate in Subjects with Pulmonary Arterial Hypertension who have completed study  
*Role:* Site Investigator  
*Sponsoring Agency:* Pfizer Pharmaceuticals  
*Period of Support:* 2/27/2009-8/1/11  
*Amount of Support:* \$15,900
35. *Project Title:* A Phase 3, Multi-Center, Open Label Study to Evaluate the Long-Term Safety of Monotherapy Sitaxsentan Sodium and Combination Therapy with Sitaxsentan Sodium and Sildenafil Citrate in Subjects with Pulmonary Arterial Hypertension(B132-1002)  
*Role:* Site Investigator  
*Sponsoring Agency:* Pfizer Pharmaceuticals  
*Period of Support:* 2/27/2009-8/1/11  
*Amount of Support:* \$11,500
36. *Project Title:* A Phase 3, Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Safety and Efficacy Study of Sitaxsentan Sodium in Subjects with Pulmonary Arterial Hypertension (B132-1001)  
*Role:* Site Investigator  
*Sponsoring Agency:* Pfizer Pharmaceuticals  
*Period of Support:* 2/27/2009-8/1/11  
*Amount of Support:* . \$23,000
37. *Project Title:* A Phase 2, Randomized, Double blind, Placebo-controlled, Multicenter, Dose-ranging Study of Cicletanine in Subjects with Pulmonary Arterial Hypertension: GS-US-235-0101  
*Role:* Site Investigator  
*Sponsoring Agency:* Gilead Sciences  
*Period of Support:* 5/27/09- ongoing  
*Amount of Support:* \$33,668



38. *Project Title:* Administrative Supplement to Natriuretic Peptides in Pulmonary Endothelial Cell Barrier Function” (3R01HL088328-03S1)  
*Role:* Principal Investigator  
*Sponsoring Agency:* NIH/ NHLBI  
*Period of Support:* 10/1/2009-7/31/2011  
*Amount of Support.* \$200,000
39. *Project Title:* Stem Cell Biology: New Directions in Clinical and Basic Research (P20 RR025179-01)  
*Role:* Project Mentor, (Peter Quesenberry)  
*Sponsoring Agency:* NIH/ NHLBI  
*Period of Support:* 10/1/2009-9/30/2014  
*Amount of Support.* \$12,083,271
40. *Project Title:* A Randomized, Multicenter Study of First-Line Ambrisentan and Tadalafil Combination Therapy in Subjects with Pulmonary Arterial Hypertension (AMBITION).  
*Role:* Site Investigator  
*Sponsoring Agency:* Gilead Sciences, Inc.  
*Period of Support:* -07/14/10- present  
*Amount of Support.* \$20,600
41. *Project Title:* A randomized, double-blind, placebo-controlled, multi-centre and multi-national study to assess the efficacy and safety of different doses of a new drug (BAY 63-2521), given orally to patients with Pulmonary Arterial Hypertension (PATENT-1)  
*Role:* Site Investigator  
*Sponsoring Agency:* BAYER Healthcare  
*Period of Support:* 9/22/10- present  
*Amount of Support:* \$14,000
42. *Project Title:* Long-term extension, multi-centre, multi-national study to evaluate the safety and tolerability of oral BAY 63-2521 (1 mg, 1.5 mg, 2 mg, or 2.5 mg tid) in patients with Pulmonary Arterial Hypertension (PAH) (PATENT 2).  
*Role:* Site Investigator  
*Sponsoring Agency:*  
*Period of Support:* 9/22/10 - present  
*Amount of Support:* \$14,000
43. *Project Title:* Randomized Placebo Control Trial of Treprostinil and Tadalafil vs. Treprostinil Alone in Patients with Pulmonary Arterial  
*Role:* Site Investigator  
*Sponsoring Agency:* United Therapeutics  
*Period of Support:* 12/16/10 - present  
*Amount of Support:* \$3,200

44. *Project Title:* Randomized Placebo Control Trial of Treprostinil and Tadalafil vs. Treprostinil Alone in Patients with Pulmonary Arterial Hypertension  
*Role:* Principal Investigator  
*Sponsoring Agency:* Investigator Initiated Trial, United Therapeutics, Inc  
*Period of Support:* 12/1/2010-6/30/2012  
*Amount of Support.* \$311,000
45. *Project Title:* PROSPECT Registry (Registry to Prospectively Describe Use of Epoprostenol for Injection (“RTS Epoprostenol”) in Patients with Pulmonary Arterial Hypertension)  
*Role:* Site Investigator  
*Sponsoring Agency:* Actelion Pharmaceutical  
*Period of Support:* 1/5/11 - present  
*Amount of Support:* \$7,000
46. *Project Title:* Post marketing Observational Study to Assess Respiratory Tract Adverse Events in Pulmonary Arterial Hypertension Patients Treated with Tyvaso® (treprostinil) Inhalation Solution (ASPIRE)  
*Role:* Site Investigator  
*Sponsoring Agency:* United Therapeutics  
*Period of Support:* 03/17/2011-present  
*Amount of Support.* \$10,000
47. *Project Title:* Metabolism and Right Ventricular Structure and Function, The Mesa-RV Study  
*Role:* Mentor (PI Corey Ventetuolo)  
*Sponsoring Agency:* Scientist Development Grant, American Heart Association  
*Period of Support:* 7/1/11-6/30/16  
*Amount of Support.* \$593,000
48. *Project Title:* National Biological Sample and Data Repository for Pulmonary Arterial Hypertension  
*Role:* Co-Investigator  
*Sponsoring Agency:* NIH-NHLBI 1 R24 HL105333-01A1 (PI William Nichols)  
*Period of Support:* 12/1/2011-11/30/2016  
*Amount of Support.* \$41,768.
49. *Project Title:* Natriuretic Peptide Receptor-C in Modulation of Acute Lung Injury  
*Role:* Principal Investigator  
*Sponsoring Agency:* NIH-NHLBI HL123635  
*Period of Support:* 7/1/2015-6/30/2019  
*Amount of Support.* \$250,000/year.

50. *Project Title:* The Role of NPR-C In Modulation Of Acute Lung Injury

*Role:* Principal Investigator

*Sponsoring Agency:* NIH-NHLBI R01HL123965

*Period of Support:* 7/1/2015-3/31/2019

*Amount of Support:* \$1,076,579

### UNIVERSITY TEACHING ROLES

<b>'Course</b>	<b>Title</b>	<b>Role</b>	<b># of students per session</b>	<b># of sessions per year</b>	<b>Academic Year</b>
Biomed 281	Pathophysiology	Small Group Facilitator	8-10	1	1991-1998
Biomed 195	Research/	Instructor	1	1	1997-1998
Independent Study	Research	Mentor	1 (Alan Chu)	Fall and Spring Semester	2003-2004
Summer Research	Early Identification	Mentor	1	Summer Program	2000-2004
Biomed 209	Topics in Physiology	Co-Director	8	30	2004-2007
Biomed 350	Pulmonary Pathophysiology	Lecturer	100	1	2004-2005
Biomed 284/286B	Cell Pathology	Lecturer	10	1	2008

### HOSPITAL TEACHING ROLES

<b>Course/Program</b>	<b>Role</b>	<b># of students per session</b>	<b># of sessions per year</b>	<b>Hours per session</b>	<b>Academic Year</b>
Medical Intensive Care Unit	Attending Physician	1S, 6R, 1F	80	3	1991-present
Pulmonary Consult Service	Attending Physician	1S, 3R, 1F	20	3	1991-present
Respiratory Care Unit	Attending Physician	4R	10	3	1996-present

Medical ICU Lecture Series	Lecturer	1S, 6R, 1F	30	1	1991-present
Pulmonary Fellows Lecture Series	Lecturer	6F	1	1	1993-present
Critical Care Fellows Lecture Series	Lecturer	6F	3	1	1994-present
Medical Resident Lecture Series	Lecturer	20R, 4S	1	1	1994-present
House Officer Research Project	Supervisor	2R	24	1	1999-present.
#* S – Medical Students, R- Medical Residents, F - Pulmonary Fellows					

#### UNDERGRADUATE MENTEES:

Sadiat Kristina Olatunbosun 2002  
Melanie Napier 2003  
Justice Walker 2004

#### GRADUATE MENTEES

Frank Arnal  
Richard Swift  
Jeffery Greene  
Iaona Preston, MD  
Lisa Gambardella  
Sejal Thacker  
Gerald Carino, MD  
Andrew Stone  
Jason Aliotta  
Garuav Choudhary  
Chee Chan, MD  
Brian Casserly, MD  
Arkadiy Finn  
Timur Graham

## FACULTY FOR TRAINING GRANTS

NIH R25 Short-term interventions to increase diversity in health related research (PI S. Rounds)  
NIH T32 Cardiopulmonary Research (PI G. Korin)  
NIH T32 GM065085 Trauma and Inflammation Research Training Grant ( PI J. Albina)  
NIH T35 Alpert Medical Student Summer Research Program (PI P. Gruppuso)  
NIH COBRE Center for Stem Cell Biology (PI P. Quesenberry)  
NIH COBRE Cardiovascular Research (PI S. Rounds)

## CME ACTIVITIES

Course Director - Update in Diagnosis and Treatment of Pulmonary Hypertension, Newport, RI, June 9, 2006.

Course Director – 2<sup>nd</sup> Annual Update in Pulmonary Arterial Hypertension, July 20, 2007.

Course Director – Prevention and Treatment of Venous Thromboembolism, Providence RI, February 29, 2008

Course Director – 3<sup>rd</sup> Annual Update in Pulmonary Arterial Hypertension, Newport, RI, July 18, 2008.