CURRICULUM VITAE

JOE G. N. GARCIA, MD
https://en.wikipedia.org/wiki/Joe_G._N._Garcia
January, 2023

CURRENT APPOINTMENTS:

Dr. Herbert Werthheim Professor of Inflammation Science
Endowed Chair, University of Florida- Scripps Research Insitute, Jupiter, Florida

PERSONAL DATA:

Business Address:
University of Florida-Scripps Research Institute
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Jupiter, Fl 33458
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EDUCATION AND TRAINING:

- BS Biology, 1972-1976 — University of Dallas, Irving, Texas
- MD, 1976-1980 — University of Texas Southwestern Medical School Dallas, Texas
- Intern and Resident, 1980-1983 — University of Iowa Hospitals and Clinics Department of Internal Medicine, Iowa City, Iowa
- Fellow, 1983-1985 — Albany Medical College Division of Pulmonary Diseases, Albany, New York

PROFESSIONAL EXPERIENCE:

Instructor, Department of Medicine, 1984-1985
Albany Medical College of Union University, Albany, New York

Assistant Professor of Medicine, 1985-1988
University of Texas Health Center at Tyler, Tyler, Texas

Associate Professor of Medicine, Physiology and Biophysics, 1988-1992
Indiana University School of Medicine, Indianapolis, Indiana

Dr. Calvin H. English Professor of Medicine (Physiology/Biophysics), 1992-1998
Endowed Chair, Indiana University School of Medicine, Indianapolis, Indiana

Dr. David Marine Professor of Medicine, 1998-2005
Endowed Chair, Johns Hopkins University School of Medicine, Baltimore, Maryland

Professor of Environmental Health Sciences, 1999-2005
Johns Hopkins University School of Hygiene, Baltimore, Maryland

Professor of Biomedical Engineering, 2001-2005
Johns Hopkins University School of Medicine, Baltimore, Maryland

Dr. Lowell T. Coggeshall Professor of Medicine, 2005-2010
Endowed Chair, University of Chicago, Chicago, Illinois

Earl M. Bane Professor of Medicine, 2010- 2013
Endowed Professorship, University of Illinois at Chicago, Chicago Illinois

Professor of Bioengineering, 2010- 2013
College of Engineering, University of Illinois at Chicago, Chicago Illinois

Professor of Pharmacology, 2010- 2013
College of Medicine, University of Illinois at Chicago, Chicago Illinois

Dr. Merlin DuVal Professor of Medicine, September 2013- present
Endowed Chair, College of Medicine, University of Arizona, Tucson, Arizona

Dr. Merlin DuVal Professor of Physiology, September 2017- present
Endowed Chair, College of Medicine, University of Arizona, Tucson, Arizona

Professor of Pharmacy, September 2018- present
Endowed Chair, College of Pharmacy, University of Arizona, Tucson, Arizona

Dr. Herbert Werthheim Professor of Inflammation Science, January 2023- present
Endowed Chair, University of Florida- Scripps Research Insitute, Jupiter, Florida

Other Professional Experience:

University of Texas Health Center at Tyler
Director, Occupational Medicine, 1986-1988
University of Texas Health Center at Tyler, Tyler, Texas

Indiana University
Graduate Faculty (Physiology/Biophysics), 1989-1998
Indiana University, Bloomington, Indiana

Director, Indiana University Occupational Lung Center, 1988-1998
Indiana University School of Medicine, Indianapolis, Indiana

Johns Hopkins University
Director, Division of Pulmonary and Critical Care Medicine,
Johns Hopkins University, Department of Medicine, 1998-2005

Director, Johns Hopkins University Occupational Lung Center, 1999-2005

Deputy Director for Basic and Translational Research,
Johns Hopkins University, Bayview Campus, 2002-2005

Director, Center for Translational Respiratory Medicine,
Johns Hopkins University Department of Medicine, 2002-2005

University of Chicago

Chairman, Department of Medicine
University of Chicago, 2005-2009

Interim Section Chief, Section of Cardiology
University of Chicago, 2006-2007

Interim Section Chief, Section of Geriatrics and Palliative Medicine
University of Chicago, 2007-2008

University of Illinois

Vice Chancellor for Research
University of Illinois at Chicago, 2010-2012

Director, Institute for Personalized Respiratory Medicine
University of Illinois at Chicago, 2010-2013

Graduate Faculty, Honors College
University of Illinois at Chicago, 2010- 2013

Vice President for Health Affairs
University of Illinois, 2011- 2013

University of Arizona

Senior Vice President for Health Sciences
University of Arizona, September 2013-January 2017.

University of Arizona Health Network Board
September 2013- February 2015

Arizona Bioscience Roadmap Steering Committee
September 2013-present

Interim Dean, College of Medicine -Tucson
University of Arizona, March 2014-February 2015

University of Florida

Associate Vice President for Research UF Health
University of Florida, January 2023-present

Director, Center for Inflammation Science and System Medicine
University of Florida, Scripps Research Institute, January 2023-present

LEADERSHIP POSITIONS AND ACCOMPLISHMENTS

- **Johns Hopkins University- Director, Division of Pulmonary and Critical Care Medicine (PCCM) in the Department of Medicine, 1998-2005.** Over a 7-year period, as the David Marine Professor of

Medicine, JGNG successfully led the PCCM Division to the pinnacle of academic pulmonary medicine with a research portfolio that rose from a 1998 ranking of ~20th nationally in NIH funding (~$2M/yr) to the #1 NIH-funded PCCM division in the nation in 2005 (~$30M/yr). Major efforts were directed at increasing Divisional diversity and translational approaches to biomedical research. These efforts were very successful and led to marked changes in JHU DOM diversity initiatives as well as to 3 new SCCORs, 1 new P50, 2 new P01s, and a new U01 in Genomic Applications (Garcia PI).

- **University of Chicago- Chairman, Department of Medicine, 2005-2009.** As the Lowell T. Coggeshall Professor and Chairman of the Department of Medicine (DOM) at the University of Chicago, JGNG began his tenure with a stated lofty goal of pushing the DOM to the top 10 of national DOMs in terms of NIH funding. Within four years, via an emphasis on translational research and strategic recruitments, the DOM climbed from a national DOM ranking of #25 to a 2010 DOM ranking of #10, an accomplishment particularly laudable given a faculty size ~50% of the top 10 ranked departments. JGNG served as PI of the UC CTSA application (NIH Roadmap). In addition, JGNG aggressively and successfully pushed efforts to increase Departmental diversity and translational approaches to biomedical research.
- **University of Illinois at Chicago- Vice Chancellor for Research, 2010-2012.** As VCR, JGNG oversaw a $400M research portfolio (70% biomedical research) and launched a broad strategic plan that continues to drive the deployment of resources and created and recruited Directors for 3 new Institutes: Institute of Human Genetics, Institute of Minority Health, and an Institute of Interventional Health Informatics. JGNG passionately championed the physician scientist career path to students, housestaff and fellows to expand the pool of physician scientists, particularly underrepresented individuals, and instituted sweeping culture changes to address this need.
- **University of Illinois - Vice President for Health Affairs (VPHA), 2010- 2013.** Reporting only to the President of the University of Illinois, JGNG oversaw a $1.5 billion enterprise in total annual clinical operating revenues & expenses with all clinical activities reporting through the VPHA. JGNG implemented a **complete rebranding** of University Medical Center to newly launched **University of Illinois Hospital and Health Science System,** an integrated system that included a 495 bed University hospital, a VA hospital, over 60 outpatient care clinics, 12 Federally Qualified Health Centers, 7 health science colleges and 4 regional campuses. The UI Health System provided significant proportion of health care delivered to underserved Chicagoland populations with more than 850,000 patient care encounters and ~$2.1 billion in charge activity (Hospital: $1.6B; practice plan: $350M). The healthcare enterprise employed more than 8,000 full time providers and support staff. JGNG aggressively remodeled the UI Health System in order to be responsive and successful in the changing Affordable Care Act-driven healthcare landscape. Although modest, the FY 2013 margin for the UI Health System was the highest in the past 15 years.
- **University of Arizona- Senior Vice President for Health Sciences, September 2013- January 2017**. As SVP and the Dr. Merlin DuVal Professor of Medicine, JGNG led to a **rebranding** of the Arizona Health Science Center as **the University of Arizona Health Sciences (UAHS),** and was lead member of the UA Health Science (UAHS) team to successfully bring a transformative academic partnership between UAHS and Banner Health System. This historic partnership was brought to closure after an arduous 14 months of highly complex, labor-intensive negotiations. Over the 3.5 yr time frame in his leadership of UAHS, including serving as the Interim Dean of the College of Medicine, JGNG recruited 3 Health Science College Deans, 10 key Department Chair positions, 10 new Associate Vice President and Center Directors, and 12 Division directors, as well as multiple key scientific leaders. JGNG recruited Andrew Kraft MD to direct the UA NCI-designated Comprehensive Cancer Center after a 2-year failed search who successfully led the renewal of the NCI Comprehensive Cancer Center grant in July 2016. JGNG led sweeping integration of UAHS critical services with improvements in cost efficiency and quality of service (Pre- and Post-Award Research Management, Development, Informatics, Biobanking, etc). JGNG also successfully led a University–wide effort to promote 4 UAHS thematic areas of excellence in health disparities, population health, precision medicine, and neuroscience. JGNG established the Center for Innovation in Brain Science and via similar intiatives, led to a 50% increase in UAHS NIH funding compared with 2012, including the award of a $43M NIH Precision Medicine Initiative "All of Us" award, the largest in Arizona's history. As the Interim Dean, College of Medicine –Tucson, (March 2014-February 2015), JGNG initiated efforts to increasing the diversity of the

College with substantial success including tripling of the number Latino and American Indian students in the medical college.

ENTREPRENEURIAL ACCOMPLISHMENTS

- **Aqualung Therapeutics Corporation- Founder & Chief Executive Officer, 2010-present**.
  The eNamptor™ Therapeutic Platform for Acute and Chronic Inflammatory Lung Injury. Dr. Garcia identified a novel therapeutic target, nicotinamide phohoribosyltransferasae or NAMPT, a cytozyme protein that is secreted and functions as a potent inflammatory cytokine to increase systemic and local lung inflammation. He founded and serves as CEO of Aqualung Therapeutics (https://www.aqualungtherapeutics.com) which has developed an anti-inflammatory platform, **eNamptor™** consisting of an eNAMPT biomarker assay, a *NAMPT* genetic assay and a humanized monoclonal antibody therapy (**ALT-100 mAb**) that neutralizes eNAMPT and attenuates inflammatory injuries. The lead eNamptor™ indication is for **Acute Respiratory Distress Syndrom (ARDS)/Ventilator-Induced Lung Injury (VILI)** with eNamptor™ designed to identify patients likely to respond to ALT-100 and reduce the incidence of ARDS/VILI and improve the treatment outcomes of patients with respiratory failure and who are placed on mechanical ventilation. At present, there are no FDA-approved strategies to ameliorate ARDS/VILI, or reduce the associated increased healthcare costs of these critically ill patients,a sobering truth in the COVID-19 pandemic. Aqualung Therapeutics was awarded over $28M in **NIH STTR/R01 awards** to develop ALT-100 mAb for the indications of ARDS/VILI, Chorioamnionitis, Pulmonary Hypertension, NASH, Inflammatory Bowel Disease, and Radiation-Induced Lung Injury and Fibrosis. Aqualung successfully filed FDA IND in August 2022 for ARDS and is poised for siialr success for the indication of Radiation Lung Fibrosis. Aqualung Therapeutics has been issued a composition of matter patent for ALT-100 mAb as well as method of use patents for ARDS, PAH, pulmonary fibrosis. Human Phase 1A safety studies commenced in June 2022 with Phase 2A trials in the ICU beginning in Q3 2023.

- **Restore Therapeutics Inc.- Co-Founder & Chief Medical Officer, 2017-2019.** The loss of lung endothelial cell (EC) barrier integrity, resulting in vascular leakage and alveolar flooding, is a critical feature of the pathobiology of ARDS and is directly related to excessive generation of reactive oxygen species (ROS). Therefore, there an acute need exists for novel therapies against ARDS that target the leaky lung vasculature and attenuates the untoward effects of ROS. Restore Therapeutics is a University of Arizona (UA) biotech startup company that has been awarded an **STTR Phase I grant** ($225,000) to formulate the "ReStore Liposome", an ACE antibody-conjugated liposome that encargoes the combination of TySIPonate and a Nox4 small molecule inhibitor as a novel combination therapeutic strategy to reduce ARDS morbidity and mortality.

MENTORING ACCOMPLISHMENTS

- Trained over 75 MDs, PhDs, MD/PhDs, and pre/post-docs.
- Mentor to ~20 K-08, K-23, K-01 Series awardeees, ~25 F32 awardees.
- Selected Trainees:
  - Steven M Dudek MD- Chief, Division of Pulmonary and Critical Care Medicine, University of Illinois, Chicago, IL
  - Roberto Machado MD- Chief, Division of Pulmonary and Critical Care Medicine, Indiana University, Indianapolis, IN
  - Irina Petrache MD- Chief, Division of Pulmonary and Critical Care Medicine, National Jewish Hospital, Denver CO
  - Imre Noth MD- Chief, Division of Pulmonary and Critical Care Medicine, University of Virginia, Charlottesville, VA.
  - Ivan Rosas MD- Chief, Division of Pulmonary and Critical Care Medicine, Baylor University, Houston TX.
  - Konstatin Birukov PhD- Endowed Professor, Director of Lung Injury Institute, University of Maryland, Baltimore MD

- Alexander Verin PhD- Endowed Professor, Georgia State University, Augusta, GA

RESEARCH ACCOMPLISHMENTS

- **PUBLICATIONS**
  - **>600 publications, >52,000 citations**
  - **Web of Science H-index 102, Google Scholar H-index 115)**
  - **ORCID** 0000-0002-6934-0420

1. **Garcia JG**, Hunninghake GW, and Nugent KM. Thoracic gas volume measurement. Increased variability in patients with obstructive ventilatory defects. *Chest,* 85(2): 272-275. PMID: 6692709. 1984.

2. **Garcia JG**, and Keogh BA. Bronchoalveolar lavage: a decade later. *Irish Medical J,* 77(12): 399-401. PMID: 6394542. 1984.

3. Malik AB, Noonan TC, Selig WM, and **Garcia JG**. Effects of exogeneous leukotrienes on the pulmonary circulation. *Progress Clinical Biologic Research,* 199: 221-235. PMID: 2999824. 1985.

4. **Garcia JG**, Parhami N, Killam D, Garcia PL, and Keogh BA. Bronchoalveolar lavage fluid evaluation in rheumatoid arthritis. *American Review Respiratory Disease,* 133(3): 450-454. PMID: 3485395. 1986a.

5. **Garcia JG**, Wolven RG, Garcia PL, and Keogh BA. Assessment of interlobar variation of bronchoalveolar lavage cellular differentials in interstitial lung diseases. *American Review Respiratory Disease,* 133(3): 444-449. PMID: 3954253. 1986b.

6. **Garcia JG**, Siflinger-Birnboim A, Bizios R, Del Vecchio PJ, Fenton JW, and Malik AB. Thrombin-induced increase in albumin permeability across the endothelium. *J Cellular Physiology,* 128(1): 96-104. PMID: 3722274. 1986c.

7. **Garcia JGN**, Perlman MB, Garcia PL, and Keogh BA. Effects of BAL fluid on neutrophil function in rheumatoid arthritis. *Chest,* 89(3 Supplement): 151S-153S. PMID. 1986d.

8. Burhop KE, **Garcia JG**, Selig WM, Lo SK, van der Zee H, Kaplan JE, and Malik AB. Platelet-activating factor increases lung vascular permeability to protein. *J Applied Physiology,* 61(6): 2210-2217. PMID: 3804927. 1986.

9. Weiland JE, **Garcia JG**, Davis WB, and Gadek JE. Neutrophil collagenase in rheumatoid interstitial lung disease. *J Applied Physiology,* 62(2): 628-633. PMID: 3031003. 1987.

10. Cooper JA, Del Vecchio PJ, Minnear FL, Burhop KE, Selig WM, **Garcia JG**, and Malik AB. Measurement of albumin permeability across endothelial monolayers in vitro. *J Applied Physiology,* 62(3): 1076-1083. PMID: 3571065. 1987.

11. **Garcia JG**, Munim A, Nugent KM, Bishop M, Hoie-Garcia P, Parhami N, and Keogh BA. Alveolar macrophage gold retention in rheumatoid arthritis. *J Rheumatology,* 14(3): 435-438. PMID: 3114483. 1987a.

12. **Garcia JG**, Noonan TC, Jubiz W, and Malik AB. Leukotrienes and the pulmonary microcirculation. *American Review Respiratory Disease,* 136(1): 161-169. PMID: 3037955. 1987b.

13. **Garcia JG**, James HL, Zinkgraf S, Perlman MB, and Keogh BA. Lower respiratory tract abnormalities in rheumatoid interstitial lung disease. Potential role of neutrophils in lung injury. *American Review Respiratory Disease,* 136(4): 811-817. PMID: 2821854. 1987c.

14. **Garcia JGN**, and Griffith DE. Tobacco smoking and asbestosis: Is there a link? *J National Asbestos Council,* 5(33): 35. PMID. 1987.

15. Idell S, Gonzalez K, Bradford H, MacArthur CK, Fein AM, Maunder RJ, **Garcia JG**, Griffith DE, Weiland J, Martin TR, and et al. Procoagulant activity in bronchoalveolar lavage in the adult respiratory distress syndrome. Contribution of tissue factor associated with factor VII. *American Review Respiratory Disease,* 136(6): 1466-1474. PMID: 3688650. 1987.

16. Selig WM, Burhop KE, **Garcia JG**, and Malik AB. Substance P-induced pulmonary vasoreactivity in isolated perfused guinea pig lung. *Circulation Research,* 62(2): 196-203. PMID: 2448056. 1988.

17. **Garcia JG**, Perlman MB, Ferro TJ, Johnson A, Jubiz W, and Malik AB. Inflammatory events after fibrin microembolization. Alterations in alveolar macrophage and neutrophil function. *American Review Respiratory Disease,* 137(3): 630-635. PMID: 2830812. 1988a.

18. Wallace RJ, Jr., Steele LC, Brooks DL, Forrester GD, **Garcia JG**, Luman JI, Wilson RW, Shepherd S, and McLarty J. Ampicillin, tetracycline, and chloramphenicol resistant Haemophilus influenzae in adults with chronic lung disease. Relationship of resistance to prior antimicrobial therapy. *American Review Respiratory Disease,* 137(3): 695-699. PMID: 3257853. 1988.

19. Griffith DE, and **Garcia JGN**. Asbestos exposure and small airway disease. *J National Asbestos Council,* 6(41): 43. PMID. 1988a.

20. Griffith DE, and **Garcia JG**. Asthmatic bronchitis. *Seminars Respiratory Infection,* 3(1): 27-39. PMID: 3283880. 1988b.

21. Griffith DE, and **Garcia JGN**. Tobacco smoking, asbestos exposure and lung cancer. *J National Asbestos Council,* 6: 82-86. PMID. 1988c.

22. **Garcia JG**, Azghani A, Callahan KS, and Johnson AR. Effect of platelet-activating factor on leukocyte-endothelial cell interactions. *Thrombosis Research,* 51(1): 83-96. PMID: 2842887. 1988b.

23. **Garcia JG**, Gray LD, Dodson RF, and Callahan KS. Asbestos-induced endothelial cell activation and injury. Demonstration of fiber phagocytosis and oxidant-dependent toxicity. *American Review Respiratory Disease,* 138(4): 958-964. PMID: 3202471. 1988c.

24. Idell S, **Garcia JG**, Gonzalez K, McLarty J, and Fair DS. Fibrinopeptide A reactive peptides and procoagulant activity in bronchoalveolar lavage: relationship to rheumatoid interstitial lung disease. *J Rheumatology,* 16(5): 592-598. PMID: 2666653. 1989.

25. **Garcia JG**, Griffith DE, Cohen AB, and Callahan KS. Alveolar macrophages from patients with asbestos exposure release increased levels of leukotriene B4. *American Review Respiratory Disease,* 139(6): 1494-1501. PMID: 2543249. 1989a.

26. **Garcia JG**, Dodson RF, and Callahan KS. Effect of environmental particulates on cultured human and bovine endothelium. Cellular injury via an oxidant-dependent pathway. *Laboratory Investigation,* 61(1): 53-61. PMID: 2747217. 1989b.

27. **Garcia JGN**, Griffith DE, Levin JL, and Idell S. Tobacco smoke exposure in Occupational Lung Disease. *Seminars Respiratory Critical Care Medicine,* 10(04): 372-385. PMID. 1989c.

28. Levin JL, and **Garcia JGN**. Cancer risk of low level asbestos exposure. *J National Asbestos Council,* 8: 133-137. PMID. 1989.

29. Stocks JM, Wallace RJ, Jr., Griffith DE, **Garcia JG**, and Kohler RB. Ofloxacin in community-acquired lower respiratory infections. A comparison with amoxicillin or erythromycin. *American J Medicine,* 87(6C): 52S-56S. PMID: 2690620. 1989.

30. Griffith DE, and **Garcia JGN**. Tobacco Cigarettes, Smoking, Smoking Cessation, and Chronic Obstructive Pulmonary Disease. *Seminars Respiratory Critical Care Medicine,* 10(04): 356-371. PMID. 1989.

31. Idell S, and **Garcia JGN**. Mechanisms of Smoking-Induced Lung Injury. *Seminars Respiratory Critical Care Medicine,* 10(04): 345-355. PMID. 1989.

32. Rizzo MT, Tricot G, Hoffman R, Jayaram HN, Weber G, **Garcia JG**, and English D. Inosine monophosphate dehydrogenase inhibitors. Probes for investigations of the functions of guanine nucleotide binding proteins in intact cells. *Cell Signaling,* 2(6): 509-519. PMID: 1981974. 1990.

33. **Garcia JG**, Painter RG, Fenton JW, English D, and Callahan KS. Thrombin-induced prostacyclin biosynthesis in human endothelium: role of guanine nucleotide regulatory proteins in stimulus/coupling responses. *J Cellular Physiology,* 142(1): 186-193. PMID: 2105325. 1990a.

34. Parkinson JF, **Garcia JG**, and Bang NU. Decreased thrombin affinity of cell-surface thrombomodulin following treatment of cultured endothelial cells with beta-D-xyloside. *Biochemistry Biophysical Research Communications,* 169(1): 177-183. PMID: 2161655. 1990.

35. **Garcia JG**, Griffith DE, Williams JS, Blevins WJ, and Kronenberg RS. Reduced diffusing capacity as an isolated finding in asbestos- and silica-exposed workers. *Chest,* 98(1): 105-111. PMID: 2163299. 1990b.

36. Taylor GS, **Garcia JG**, Dukes R, and English D. High-performance liquid chromatographic analysis of radiolabeled inositol phosphates. *Analytical Biochemistry,* 188(1): 118-122. PMID: 2221351. 1990.

37. Callahan KS, Griffith DE, and **Garcia JG**. Asbestos exposure results in increased lung procoagulant activity in vivo and in vitro. *Chest,* 98(1): 112-119. PMID: 2361375. 1990.

38. Dodson RF, **Garcia JG**, O'Sullivan M, Corn C, Levin JL, Griffith DE, and Kronenberg RS. The usefulness of bronchoalveolar lavage in identifying past occupational exposure to asbestos: a light and electron microscopy study. *American J Industrial Medicine,* 19(5): 619-628. PMID: 1647134. 1991.

39. Kronenberg RS, Levin JL, Dodson RF, **Garcia JG**, and Griffith DE. Asbestos-related disease in employees of a steel mill and a glass bottle manufacturing plant. *Toxicology Industrial Health,* 7(1-2): 73-79. PMID: 1853355. 1991a.

40. English D, Taylor G, and **Garcia JG**. Diacylglycerol generation in fluoride-treated neutrophils: involvement of phospholipase D. *Blood,* 77(12): 2746-2756. PMID: 2043770. 1991.

41. Dominguez JH, **Garcia JG**, Rothrock JK, English D, and Mann C. Fluoride mobilizes intracellular calcium and promotes Ca2+ influx in rat proximal tubules. *American J Physiology,* 261(2 Pt 2): F318-327. PMID: 1652206. 1991.

42. **Garcia JG**, Dominguez J, and English D. Sodium fluoride induces phosphoinositide hydrolysis, Ca2+ mobilization, and prostacyclin synthesis in cultured human endothelium: further evidence for regulation by a pertussis toxin-insensitive guanine nucleotide-binding protein. *American J Respiratory Cell Molecular Biology,* 5(2): 113-124. PMID: 1654060. 1991.

43. Kronenberg RS, Levin JL, Dodson RF, **Garcia JG**, and Griffith DE. Asbestos-related disease in employees of a steel mill and a glass bottle-manufacturing plant. *Annals New York Academy Science,* 643: 397-403. PMID: 1809151. 1991b.

44. English D, Akard LP, Taylor GS, Rizzo MT, Dominguez J, and **Garcia JG**. Gp-regulated phosphoinositide hydrolysis in turkey and human erythrocytes exposed to fluoride ion: relationship to calcium influx. *J Laboratory Clinical Medicine,* 119(1): 87-98. PMID: 1309378. 1992.

45. Stasek JE, Jr., and **Garcia JG**. The role of protein kinase C in alpha-thrombin-mediated endothelial cell activation. *Seminars Thrombosis Hemostasis,* 18(1): 117-125. PMID: 1574713. 1992.

46. Griffith DE, **Garcia JG**, James HL, Callahan KS, Iriana S, and Holiday D. Hyperoxic exposure in humans. Effects of 50 percent oxygen on alveolar macrophage leukotriene B4 synthesis. *Chest,* 101(2): 392-397. PMID: 1310457. 1992.

47. **Garcia JG**, Stasek J, Natarajan V, Patterson CE, and Dominguez J. Role of protein kinase C in the regulation of prostaglandin synthesis in human endothelium. *American J Respiratory Cell Molecular Biology,* 6(3): 315-325. PMID: 1540395. 1992a.

48. Patterson CE, Rhoades RA, and **Garcia JG**. Evans blue dye as a marker of albumin clearance in cultured endothelial monolayer and isolated lung. *J Applied Physiology,* 72(3): 865-873. PMID: 1568982. 1992.

49. Sacks DB, Davis HW, Williams JP, Sheehan EL, **Garcia JG**, and McDonald JM. Phosphorylation by casein kinase II alters the biological activity of calmodulin. *Biochemistry J,* 283 (Pt 1): 21-24. PMID: 1314563. 1992.

50. Harrington MA, Daub R, Song A, Stasek J, and **Garcia JG**. Interleukin 1 alpha mediated inhibition of myogenic terminal differentiation: increased sensitivity of Ha-ras transformed cultures. *Cell Growth Differentiation,* 3(4): 241-248. PMID: 1325182. 1992.

51. **Garcia JG**, Fenton JW, and Natarajan V. Thrombin stimulation of human endothelial cell phospholipase D activity. Regulation by phospholipase C, protein kinase C, and cyclic adenosine 3'5'-monophosphate. *Blood,* 79(8): 2056-2067. PMID: 1314112. 1992b.

52. **Garcia JG**, and Natarajan V. Signal transduction in pulmonary endothelium. Implications for lung vascular dysfunction. *Chest,* 102(2): 592-607. PMID: 1322813. 1992.

53. **Garcia JGN**. Transmembrane signaling and intracellular regulation. *J Laboratory Clinical Medicine,* 120: 510-512. PMID. 1992a.

54. **Garcia JG**. (Journal Cover). Molecular mechanisms of thrombin-induced human and bovine endothelial cell activation. *J Laboratory Clinical Medicine,* 120(4): 513-519. PMID: 1402326. 1992b.

55. Stasek JE, Jr., Patterson CE, and **Garcia JG**. Protein kinase C phosphorylates caldesmon77 and vimentin and enhances albumin permeability across cultured bovine pulmonary artery endothelial cell monolayers. *J Cellular Physiology,* 153(1): 62-75. PMID: 1522136. 1992.

56. **Garcia JG**, Stasek JE, Bahler C, and Natarajan V. Interleukin 1-stimulated prostacyclin synthesis in endothelium: lack of phospholipase C, phospholipase D, or protein kinase C involvement in early signal transduction. *J Laboratory Clinical Medicine,* 120(6): 929-940. PMID: 1333514. 1992c.

57. Griffith DE, **Garcia JG**, Dodson RF, Levin JL, and Kronenberg RS. Airflow obstruction in nonsmoking, asbestos- and mixed dust-exposed workers. *Lung,* 171(4): 213-224. PMID: 8341088. 1993.

58. Al-Hassani MH, **Garcia JG**, and Gunst SJ. Differences in Ca2+ mobilization by muscarinic agonists in tracheal smooth muscle. *American J Physiology: Lung Cell Molecular Physiology,* 264(1 Pt 1): L53-59. PMID: 8430815. 1993.

59. Natarajan V, Taher MM, Roehm B, Parinandi NL, Schmid HH, Kiss Z, and **Garcia JG**. Activation of endothelial cell phospholipase D by hydrogen peroxide and fatty acid hydroperoxide. *J Biological Chemistry,* 268(2): 930-937. PMID: 8419372. 1993.

60. Natarajan V, and **Garcia JG**. Agonist-induced activation of phospholipase D in bovine pulmonary artery endothelial cells: regulation by protein kinase C and calcium. *J Laboratory Clinical Medicine,* 121(2): 337-347. PMID: 8433044. 1993.

61. Stasek JE, Jr., Natarajan V, and **Garcia JG**. Phosphatidic acid directly activates endothelial cell protein kinase C. *Biochemical Biophysical Research Communications,* 191(1): 134-141. PMID: 8447819. 1993.

62. Beckman TA, **Garcia JG**, Mastrangelo M, and Taylor CR. Physician volunteers 'give back to community'. *Indiana Medicine,* 86(3): 226-227. PMID: 8515041. 1993.

63. Taher MM, **Garcia JG**, and Natarajan V. Hydroperoxide-induced diacylglycerol formation and protein kinase C activation in vascular endothelial cells. *Archives Biochemsitry Biophysics,* 303(2): 260-266. PMID: 8512313. 1993.

64. Hart CM, Andreoli SP, Patterson CE, and **Garcia JG**. Oleic acid supplementation reduces oxidant-mediated dysfunction of cultured porcine pulmonary artery endothelial cells. *J Cellular Physiology,* 156(1): 24-34. PMID: 8314859. 1993.

65. Parkinson JF, Bang NU, and **Garcia JG**. Recombinant human thrombomodulin attenuates human endothelial cell activation by human thrombin. *Arteriosclerosis Thrombosis,* 13(7): 1119-1123. PMID: 8391310. 1993.

66. **Garcia JG**, Patterson C, Bahler C, Aschner J, Hart CM, and English D. Thrombin receptor activating peptides induce Ca2+ mobilization, barrier dysfunction, prostaglandin synthesis, and platelet-derived growth factor mRNA expression in cultured endothelium. *J Cellular Physiology,* 156(3): 541-549. PMID: 8360259. 1993.

67. Dodson RF, O'Sullivan M, Corn CJ, **Garcia JG**, Stocks JM, and Griffith DE. Analysis of ferruginous bodies in bronchoalveolar lavage from foundry workers. *British J Industrial Medicine,* 50(11): 1032-1038. PMID: 8280628. 1993.

68. Patterson CE, and **Garcia JG**. Regulation of thrombin-induced endothelial cell activation by bacterial toxins. *Blood Coagulation Fibrinolysis,* 5(1): 63-72. PMID: 8180340. 1994.

69. Natarajan V, Jayaram HN, Scribner WM, and **Garcia JG**. Activation of endothelial cell phospholipase D by sphingosine and sphingosine-1-phosphate. *American J Respiratory Cell Molecular Biology,* 11(2): 221-229. PMID: 8049083. 1994.

70. Patterson CE, Davis HW, Schaphorst KL, and **Garcia JG**. Mechanisms of cholera toxin prevention of thrombin- and PMA-induced endothelial cell barrier dysfunction. *Microvascular Research,* 48(2): 212-235. PMID: 7854206. 1994.

71. Callahan KS, and **Garcia JG**. Oxidant exposure stimulates cultured coronary artery endothelial cells to release 15-HETE: differential effects on PGI2 and 15-HETE synthesis. *J Laboratory Clinical Medicine,* 124(4): 569-578. PMID: 7930881. 1994.

72. Siddiqui RA, Harvey K, Akard L, Jansen J, **Garcia JGN**, and English D. Biochemistry of neutrophil-endothelial cell adhesion. *Proceedings ISBBP Biochemistry and Biophysics,* 1: 5-12. PMID. 1994.

73. Siddiqui R, English D, and **Garcia JG**. Rationale for juxtacrine regulation of neutrophil interactions with the stimulated endothelium. *J Laboratory Clinical Medicine,* 125(1): 18-25. PMID: 7822943. 1995a.

74. **Garcia JG**, and Schaphorst KL. Regulation of endothelial cell gap formation and paracellular permeability. *J Investigative Medicine,* 43(2): 117-126. PMID: 7735915. 1995.

75. Patterson CE, Stasek JE, Schaphorst KL, Davis HW, and **Garcia JG**. Mechanisms of pertussis toxin-induced barrier dysfunction in bovine pulmonary artery endothelial cell monolayers. *American J Physiology: Lung Cell Molecular Physiology,* 268(6 Pt 1): L926-934. PMID: 7541950. 1995.

76. **Garcia JG**, Davis HW, and Patterson CE. Regulation of endothelial cell gap formation and barrier dysfunction: role of myosin light chain phosphorylation. *J Cellular Physiology,* 163(3): 510-522. PMID: 7775594. 1995b.

77. Verin AD, Patterson CE, Day MA, and **Garcia JG**. Regulation of endothelial cell gap formation and barrier function by myosin-associated phosphatase activities. *American J Physiology: Lung Cell Molecular Physiology,* 269(1 Pt 1): L99-108. PMID: 7631821. 1995.

78. Siddiqui RA, English D, Harvey K, Cui Y, Martin MI, Wentland J, Akard L, Jansen J, Thompson J, and **Garcia JG**. Phorbol ester-induced priming of superoxide generation by phosphatidic acid-stimulated neutrophils and granule-free neutrophil cytoplasts. *J Leukocyte Biology,* 58(2): 189-195. PMID: 7643013. 1995b.

79. Spain BA, Cummings O, and **Garcia JG**. Bronchiolitis obliterans in an animal feed worker. *American J Industrial Medicine,* 28(3): 437-443. PMID: 7485196. 1995.

80. Koyama S, **Garcia JG**, Rennard SI, and Robbins RA. Calcium and protein kinase C dependency of lipoxygenase-derived neutrophil chemotactic activity release from bronchial epithelial cells. *American J Respiratory Cellular Molecular Biology,* 13(3): 366-375. PMID: 7654391. 1995.

81. **Garcia JG**, Pavalko FM, and Patterson CE. Vascular endothelial cell activation and permeability responses to thrombin. *Blood Coagulation Fibrinolysis,* 6(7): 609-626. PMID: 8562832. 1995c.

82. Gallagher PJ, **Garcia JG**, and Herring BP. Expression of a novel myosin light chain kinase in embryonic tissues and cultured cells. *J Biological Chemistry,* 270(49): 29090-29095. PMID: 7493932. 1995.

83. Cui Y, Harvey KA, Siddiqui RA, Jansen J, Akard LP, Thompson JM, **Garcia JG**, and English D. Cytosolic inactivation of translocated neutrophil plasma membrane protein tyrosine phosphatase. *Blood,* 87(1): 341-349. PMID: 8547661. 1996.

84. **Garcia JG**, Matheny Dresser KS, and Zerr AD. Respiratory health of Hispanic migrant farm workers in Indiana. *American J Industrial Medicine,* 29(1): 23-32. PMID: 8808039. 1996a.

85. **Garcia JG**, Verin AD, and Schaphorst KL. Regulation of thrombin-mediated endothelial cell contraction and permeability. *Seminars Thrombosis Hemostasis,* 22(4): 309-315. PMID: 8944415. 1996b.

86. Heligman CS, and **Garcia JGN**. Sick Building Syndrome: Indoor air quality and building-related illnesses. *Indiana Medicine,* 29: 67-70. PMID. 1996.

87. Brashear A, Unverzagt FW, Farber MO, Bonnin JM, **Garcia JG**, and Grober E. Ethylene oxide neurotoxicity: a cluster of 12 nurses with peripheral and central nervous system toxicity. *Neurology,* 46(4): 992-998. PMID: 8780078. 1996.

88. Davis HW, Crimmins DL, Thoma RS, and **Garcia JG**. Phosphorylation of calmodulin in the first calcium-binding pocket by myosin light chain kinase. *Archives Biochemistry Biophysica,* 332(1): 101-109. PMID: 8806714. 1996.

89. Karman RJ, Gupta MP, **Garcia JG**, and Hart CM. Exogenous fatty acids modulate the functional and cytotoxic responses of cultured pulmonary artery endothelial cells to oxidant stress. *J Laboratory Clinical Medicine,* 129(5): 548-556. PMID: 9142051. 1997a.

90. **Garcia JG**, Lazar V, Gilbert-McClain LI, Gallagher PJ, and Verin AD. Myosin light chain kinase in endothelium: molecular cloning and regulation. *American J Respiratory Cell Molecular Biology,* 16(5): 489-494. PMID: 9160829. 1997a.

91. Karman RJ, **Garcia JG**, and Hart CM. Endothelial cell monolayer dysfunction caused by oxidized low density lipoprotein: attenuation by oleic acid. *Prostaglandins Leukotrienes Essential Fatty Acids,* 56(5): 345-353. PMID: 9175170. 1997b.

92. Ma SF, **Garcia JG**, Reuning U, Little SP, Bang NU, and Dixon EP. Thrombin induces thrombomodulin mRNA expression via the proteolytically activated thrombin receptor in cultured bovine smooth muscle cells. *J Laboratory Clinical Medicine,* 129(6): 611-619. PMID: 9178727. 1997.

93. English D, Martin M, Harvey KA, Akard LP, Allen R, Widlanski TS, **Garcia JG**, and Siddiqui RA. Characterization and purification of neutrophil ecto-phosphatidic acid phosphohydrolase. *Biochemistry J,* 324 (Pt 3): 941-950. PMID: 9210420. 1997.

94. **Garcia JG**, Schaphorst KL, Shi S, Verin AD, Hart CM, Callahan KS, and Patterson CE. Mechanisms of ionomycin-induced endothelial cell barrier dysfunction. *American J Physiology: Lung Cell Molecular Physiology* 273(1 Pt 1): L172-184. PMID: 9252554. 1997b.

95. Cui Y, English DK, Siddiqui RA, Heranyiova M, and **Garcia JG**. Activation of endothelial cell phospholipase D by migrating neutrophils. *J Investigative Medicine,* 45(6): 388-393. PMID: 9291695. 1997.

96. Schaphorst KL, Pavalko FM, Patterson CE, and **Garcia JG**. Thrombin-mediated focal adhesion plaque reorganization in endothelium: role of protein phosphorylation. *American J Respiratory Cell Molecular Biology,* 17(4): 443-455. PMID: 9376119. 1997.

97. Hart CM, Karman RJ, Blackburn TL, Gupta MP, **Garcia JG**, and Mohler ER. Role of 8-epi PGF2alpha, 8-isoprostane, in H2O2-induced derangements of pulmonary artery endothelial cell barrier function. *Prostaglandins Leukotrienes Essential Fatty Acids,* 58(1): 9-16. PMID: 9482161. 1998.

98. **Garcia JG**, Verin AD, Herenyiova M, and English D. Adherent neutrophils activate endothelial myosin light chain kinase: role in transendothelial migration. *J Applied Physiology,* 84(5): 1817-1821. PMID: 9572834. 1998.

99. Gupta SK, Fitzgerald JF, Chong SK, Croffie JM, and **Garcia JG**. Expression of inducible nitric oxide synthase (iNOS) mRNA in inflamed esophageal and colonic mucosa in a pediatric population. *American J Gastroenterology,* 93(5): 795-798. PMID: 9625130. 1998.

100. Gilbert-McClain LI, Verin AD, Shi S, Irwin RP, and **Garcia JG**. Regulation of endothelial cell myosin light chain phosphorylation and permeability by vanadate. *J Cellular Biochemistry,* 70(1): 141-155. PMID: 9632115. 1998.

101. Mannix ET, Dresser KS, Aukley D, Farber MO, and **Garcia JG**. Cardiopulmonary exercise testing in the evaluation of patients with occupational asthma and reactive airways dysfunction syndrome. *J Investigative Medicine,* 46(5): 236-242. PMID: 9676057. 1998.

102. Verin AD, Cooke C, Herenyiova M, Patterson CE, and **Garcia JG**. Role of Ca2+/calmodulin-dependent phosphatase 2B in thrombin-induced endothelial cell contractile responses. *American J Physiology: Lung Cell Molecular Physiology,* 275(4 Pt 1): L788-799. PMID: 9755112. 1998a.

103. Verin AD, Lazar V, Torry RJ, Labarrere CA, Patterson CE, and **Garcia JG**. Expression of a novel high molecular-weight myosin light chain kinase in endothelium. *American J Respiratory Cell Molecular Biology,* 19(5): 758-766. PMID: 9806740. 1998b.

104. Verin AD, Gilbert-McClain LI, Patterson CE, and **Garcia JG**. Biochemical regulation of the nonmuscle myosin light chain kinase isoform in bovine endothelium. *American J Respiratory Cell Molecular Biology,* 19(5): 767-776. PMID: 9806741. 1998c.

105. Patterson CE, Stasek JE, Bahler C, Verin AD, Harrington MA, and **Garcia JG**. Regulation of interleukin-1-stimulated GMCSF mRNA levels in human endothelium. *Endothelium,* 6(1): 45-59. PMID: 9832332. 1998.

106. Shi S, Verin AD, Schaphorst KL, Gilbert-McClain LI, Patterson CE, Irwin RP, Natarajan V, and **Garcia JG**. Role of tyrosine phosphorylation in thrombin-induced endothelial cell contraction and barrier function. *Endothelium,* 6(2): 153-171. PMID: 9930649. 1998.

107. Csortos C, Lazar V, and **Garcia JG**. Screening cDNA Libraries Using Partial Probes to Isolate Full-Length cDNAs from Vascular Cells. *Methods Molecular Medicine,* 30: 59-72. PMID: 21341016. 1999.

108. Siddiqui RA, Akard LP, **Garcia JG**, Cui Y, and English D. Chemotactic migration triggers IL-8 generation in neutrophilic leukocytes. *J Immunology,* 162(2): 1077-1083. PMID: 9916736. 1999.

109. Lazar V, and **Garcia JG**. A single human myosin light chain kinase gene (MLCK; MYLK). *Genomics,* 57(2): 256-267. PMID: 10198165. 1999.

110. **Garcia JG**, Verin AD, Schaphorst K, Siddiqui R, Patterson CE, Csortos C, and Natarajan V. Regulation of endothelial cell myosin light chain kinase by Rho, cortactin, and p60(src). *American J Physiology: Lung Cell Molecular Physiology,* 276(6 Pt 1): L989-998. PMID: 10362724. 1999.

111. Vepa S, Scribner WM, Parinandi NL, English D, **Garcia JG**, and Natarajan V. Hydrogen peroxide stimulates tyrosine phosphorylation of focal adhesion kinase in vascular endothelial cells. *American J Physiology: Lung Cell Molecular Physiology,* 277(1 Pt 1): L150-158. PMID: 10409242. 1999.

112. English D, Cui Y, Siddiqui R, Patterson C, Natarajan V, Brindley DN, and **Garcia JG**. Induction of endothelial monolayer permeability by phosphatidate. *J Cellular Biochemistry,* 75(1): 105-117. PMID: 10462709. 1999a.

113. English D, Kovala AT, Welch Z, Harvey KA, Siddiqui RA, Brindley DN, and **Garcia JG**. Induction of endothelial cell chemotaxis by sphingosine 1-phosphate and stabilization of endothelial monolayer barrier function by lysophosphatidic acid, potential mediators of hematopoietic angiogenesis. *J Hematotherapy Stem Cell Research,* 8(6): 627-634. PMID: 10645770. 1999b.

114. Verin AD, Wang P, and **Garcia JG**. Immunochemical characterization of myosin-specific phosphatase 1 regulatory subunits in bovine endothelium. *J Cellular Biochemistry,* 76(3): 489-498. PMID: 10649445. 2000a.

115. Verin AD, Csortos C, Durbin SD, Aydanyan A, Wang P, Patterson CE, and **Garcia JG**. Characterization of the protein phosphatase 1 catalytic subunit in endothelium: involvement in contractile responses. *J Cellular Biochemistry,* 79(1): 113-125. PMID: 10906760. 2000b.

116. Verin AD, Liu F, Bogatcheva N, Borbiev T, Hershenson MB, Wang P, and **Garcia JG**. Role of ras-dependent ERK activation in phorbol ester-induced endothelial cell barrier dysfunction. *American J Physiology: Lung Cell Molecular Physiology,* 279(2): L360-370. PMID: 10926560. 2000c.

117. Samet J, Buist S, Bascom R, **Garcia JGN**, Lipsett M, Mauderly J, Manning D, Rand C, Romieu I, Utell M, and Wagner G. What constitutes an adverse health effect of air pollution? *American J Respiratory Critical Care Medicine,* 161: 665-673. PMID. 2000.

118. Brower RG, Matthay MA, Morris A, Schoenfeld DA, Thompson BT, Wiedemann HP, Arroliga AC, Fisher CJ, Komara JJ, Perez-Trepichio P, Parsons PE, Wolkin R, Welsh C, Fulkerson WJ, MacIntyre N, Mallatratt L, Sebastian M, McConnell R, Wilcox C, Govert J, Thompson D, Clemmer T, Davis R, Orme J, Weaver L, Grissom C, Eskelson M, Young M, Gooder V, McBride K, Lawton C, d'Hulst J, Peerless JR, Smith C, Brownlee J, Pluss W, Kallet R, Luce JM, Gottlieb J, Elmer M, Girod A, Park P, Daniel B, Gropper M, Abraham E, Piedalue F, Glodowski J, Lockrem J, McIntyre R, Reid K, Stevens C, Kalous D, Silverman HJ, Shanholtz C, Corral W, Toews GB, Arnoldi D, Bartlett RH, Dechert R, Watts C, Lanken PN, Anderson H, Finkel B, Hanson CW, Barton R, Mone M, Hudson LD, Lee C, Carter G, Maier RV, Steinberg KP, Bernard G, Stroud M, Swindell B, Stone L, Collins L, Mogan S, Ancukiewicz M, Hayden D, Molay F, Ringwood N, Wenzlow G, Kazeroonian AS, Gail DB, Bosken CH, Randall P, Waclawiw M, Spragg RG, Boyett J, Kelley J, Leeper K, Gray Secundy M, Slutsky A, Hyers TM, Emerson SS, **Garcia JGN**, Marini JJ, Pingleton SK, Shasby MD, and Sibbald WJ. Ventilation with lower tidal volumes as compared with traditional tidal volumes for acute lung injury and the acute respiratory distress syndrome. The Acute Respiratory Distress Syndrome Network. *New England J Medicine,* 342(18): 1301-1308. PMID: 10793162. 2000.

119. Stevens T, **Garcia JG**, Shasby DM, Bhattacharya J, and Malik AB. Mechanisms regulating endothelial cell barrier function. *American J Physiology: Lung Cell Molecular Physiology,* 279(3): L419-422. PMID: 10956614. 2000.

120. Baumgartner KB, Samet JM, Coultas DB, Stidley CA, Hunt WC, Colby TV, Waldron JA, **Garcia JGN**, and al. e. Occupational and environmental risk factors for idiopathic pulmonary fibrosis: a multicenter case-control study. Collaborating Centers. *American J Epidemiology,* 152(4): 307-315. PMID: 10968375. 2000.

121. Shi S, **Garcia JG**, Roy S, Parinandi NL, and Natarajan V. Involvement of c-Src in diperoxovanadate-induced endothelial cell barrier dysfunction. *American J Physiology: Lung Cell Molecular Physiology,* 279(3): L441-451. PMID: 10956618. 2000.

122. Borbiev T, Nurmukhambetova S, Liu F, Verin AD, and **Garcia JG**. Introduction of C3 exoenzyme into cultured endothelium by lipofectamine. *Analytical Biochemistry,* 285(2): 260-264. PMID: 11017711. 2000.

123. English D, Welch Z, Kovala AT, Harvey K, Volpert OV, Brindley DN, and **Garcia JG**. Sphingosine 1-phosphate released from platelets during clotting accounts for the potent endothelial cell chemotactic activity of blood serum and provides a novel link between hemostasis and angiogenesis. *Faseb J,* 14(14): 2255-2265. PMID: 11053247. 2000.

124. **Garcia JG**, Schaphorst KL, Verin AD, Vepa S, Patterson CE, and Natarajan V. Diperoxovanadate alters endothelial cell focal contacts and barrier function: role of tyrosine phosphorylation. *J Applied Physiology,* 89(6): 2333-2343. PMID: 11090587. 2000.

125. Kovala AT, Harvey KA, McGlynn P, Boguslawski G, **Garcia JG**, and English D. High-efficiency transient transfection of endothelial cells for functional analysis. *Faseb J,* 14(15): 2486-2494. PMID: 11099466. 2000. 22

126. Patterson CE, Lum H, Schaphorst KL, Verin AD, and **Garcia JG**. Regulation of endothelial barrier function by the cAMP-dependent protein kinase. *Endothelium,* 7(4): 287-308. PMID: 11201526. 2000.

127. Birukov KG, Csortos C, Marzilli L, Dudek S, Ma SF, Bresnick AR, Verin AD, Cotter RJ, and **Garcia JG.** Differential regulation of alternatively spliced endothelial cell myosin light chain kinase isoforms by p60(Src). *J Biological Chemistry,* 276(11): 8567-8573. PMID: 11113114. 2001.

128. English D, **Garcia JG**, and Brindley DN. Platelet-released phospholipids link haemostasis and angiogenesis. *Cardiovascular Research,* 49(3): 588-599. PMID: 11166272. 2001.

129. **Garcia JG**, Wang P, Liu F, Hershenson MB, Borbiev T, and Verin AD. Pertussis toxin directly activates endothelial cell p42/p44 MAP kinases via a novel signaling pathway. *American J Physiology: Cellular Physiology,* 280(5): C1233-1241. PMID: 11287337. 2001a.

130. Borbiev T, Verin AD, Shi S, Liu F, and **Garcia JG**. Regulation of endothelial cell barrier function by calcium/calmodulin-dependent protein kinase II. *American J Physiology: Lung Cell Molecular Physiology,* 280(5): L983-990. PMID: 11290523. 2001.

131. Petrache I, Verin AD, Crow MT, Birukova A, Liu F, and **Garcia JG**. Differential effect of MLC kinase in TNF-alpha-induced endothelial cell apoptosis and barrier dysfunction. *American J Physiology: Lung Cell Molecular Physiology,* 280(6): L1168-1178. PMID: 11350795. 2001.

132. Liu F, Verin AD, Borbiev T, and **Garcia JG**. Role of cAMP-dependent protein kinase A activity in endothelial cell cytoskeleton rearrangement. *American J Physiology: Lung Cell Molecular Physiology,* 280(6): L1309-1317. PMID: 11350812. 2001a.

133. Liu F, Verin AD, Wang P, Day R, Wersto RP, Chrest FJ, English DK, and **Garcia JG**. Differential regulation of sphingosine-1-phosphate- and VEGF-induced endothelial cell chemotaxis. Involvement of G(ialpha2)-linked Rho kinase activity. *American J Respiratory Cell Molecular Biology,* 24(6): 711-719. PMID: 11415936. 2001b.

134. Natarajan V, Scribner WM, Morris AJ, Roy S, Vepa S, Yang J, Wadgaonkar R, Reddy SP, **Garcia JG**, and Parinandi NL. Role of p38 MAP kinase in diperoxovanadate-induced phospholipase D activation in endothelial cells. *American J Physiology: Lung Cell Molecular Physiology,* 281(2): L435-449. PMID: 11435219. 2001.

135. Verin AD, Birukova A, Wang P, Liu F, Becker P, Birukov K, and **Garcia JG**. Microtubule disassembly increases endothelial cell barrier dysfunction: role of MLC phosphorylation. *American J Physiology: Lung Cell Molecular Physiology,* 281(3): L565-574. PMID: 11504682. 2001.

136. **Garcia JG**, Liu F, Verin AD, Birukova A, Dechert MA, Gerthoffer WT, Bamberg JR, and English D. (Journal Cover). Sphingosine 1-phosphate promotes endothelial cell barrier integrity by Edg-dependent cytoskeletal rearrangement. *J Clinical Investigation,* 108(5): 689-701. PMID: 11544274. 2001b.

137. Dudek SM, and **Garcia JG**. Cytoskeletal regulation of pulmonary vascular permeability. *J Applied Physiology,* 91(4): 1487-1500. PMID: 11568129. 2001.

138. Stevens T, Rosenberg R, Aird W, Quertermous T, Johnson FL, **Garcia JG**, Hebbel RP, Tuder RM, and Garfinkel S. NHLBI workshop report: endothelial cell phenotypes in heart, lung, and blood diseases. *American J Physiology: Cellular Physiology,,* 281(5): C1422-1433. PMID: 11600404. 2001.

139. Wang P, Verin AD, Birukova A, Gilbert-McClain LI, Jacobs K, and **Garcia JG**. Mechanisms of sodium fluoride-induced endothelial cell barrier dysfunction: role of MLC phosphorylation. *American J Physiology: Lung Cell Molecular Physiology,* 281(6): L1472-1483. PMID: 11704544. 2001.

140. Becker PM, Verin AD, Booth MA, Liu F, Birukova A, and **Garcia JG**. Differential regulation of diverse physiological responses to VEGF in pulmonary endothelial cells. *American J Physiology: Lung Cell Molecular Physiology,* 281(6): L1500-1511. PMID: 11704547. 2001.

141. Parinandi NL, Roy S, Shi S, Cummings RJ, Morris AJ, **Garcia JG**, and Natarajan V. Role of Src kinase in diperoxovanadate-mediated activation of phospholipase D in endothelial cells. *Archives Biochemica Biophysica,* 396(2): 231-243. PMID: 11747302. 2001.

142. Bogatcheva NV, **Garcia JG**, and Verin AD. Molecular mechanisms of thrombin-induced endothelial cell permeability. *Biochemistry (Mosc),* 67(1): 75-84. PMID: 11841342. 2002a.

143. Birukov KG, Birukova AA, Dudek SM, Verin AD, Crow MT, Zhan X, DePaola N, and **Garcia JG**. Shear stress-mediated cytoskeletal remodeling and cortactin translocation in pulmonary endothelial cells. *American J Respiratory Cell Molecular Biology,* 26(4): 453-464. PMID: 11919082. 2002.

144. Abraham E, Parsons P, Matthay MA, Steinberg KP, Wiedemann HP, Arroliga AC, Komara J, Welsh C, Fulkerson WJ, MacIntyre N, Mallatratt L, Sebastian S, Sladen R, Wilcox C, Brower RG, Thompson D, Morris AH, Clemmer T, Davis R, Orme J, Lawton CB, d'Hulst J, Smith C, Gottlieb J, Girod A, Matthay MA, Daniel B, Kallet R, Luce JM, Gryzner MA, Abraham E, Piedalue F, Kalous D, Walberg C, Lockrem J, Robert McIntyre R, Parsons P, Stevens C, Silverman HJ, Corral W, Toews GB, Arnoldi D, Bartlett RH, Dechert R, Watts C, Lanken PN, Anderson H, Finkel B, Hanson CW, Hudson LD, Lee C, Maier RV, Steinberg KP, Wheeler AP, Bernard G, Stone L, Schoenfeld DA, Thompson BT, Ancukiewicz M, Hayden D, Molay F, Ringwood N, Wenzlow G, Bernard GR, Gail DB, Bosken CH, Harabin A, Randall P, Waclawiw M, Paradise C, Dahlberg S, Spragg RG, Boyett JM, Kelley J, Leeper K, Secundy MG, Slutsky AS, Hyers TM, Emerson SS, **Garcia JGN**, Pingleton SK, Shasby MD, and Sibbald WJ. Randomized, placebo-controlled trial of lisofylline for early treatment of acute lung injury and acute respiratory distress syndrome. *Critical Care Medicine,* 30(1): 1-6. PMID. 2002.

145. Harvey K, Welch Z, Kovala AT, **Garcia JG**, and English D. Comparative analysis of in vitro angiogenic activities of endothelial cells of heterogeneous origin. *Microvascular Research,* 63(3): 316-326. PMID: 11969308. 2002a.

146. Cummings RJ, Parinandi NL, Zaiman A, Wang L, Usatyuk PV, **Garcia JG**, and Natarajan V. Phospholipase D activation by sphingosine 1-phosphate regulates interleukin-8 secretion in human bronchial epithelial cells. *J Biological Chemistry,* 277(33): 30227-30235. PMID: 12039947. 2002.

147. Dull RO, and **Garcia JG**. Leukocyte-induced microvascular permeability: how contractile tweaks lead to leaks. *Circulation Research,* 90(11): 1143-1144. PMID: 12065313. 2002.

148. English D, Brindley DN, Spiegel S, and **Garcia JG**. Lipid mediators of angiogenesis and the signalling pathways they initiate. *Biochimica Biophysica Acta,* 1582(1-3): 228-239. PMID: 12069833. 2002.

149. Liu F, Schaphorst KL, Verin AD, Jacobs K, Birukova A, Day RM, Bogatcheva N, Bottaro DP, and **Garcia JG**. Hepatocyte growth factor enhances endothelial cell barrier function and cortical cytoskeletal rearrangement: potential role of glycogen synthase kinase-3beta. *Faseb J,* 16(9): 950-962. PMID: 12087056. 2002.

150. **Garcia JG**, Wang P, Schaphorst KL, Becker PM, Borbiev T, Liu F, Birukova A, Jacobs K, Bogatcheva N, and Verin AD. Critical involvement of p38 MAP kinase in pertussis toxin-induced cytoskeletal reorganization and lung permeability. *Faseb J,* 16(9): 1064-1076. PMID: 12087068. 2002.

151. Harvey K, Siddiqui RA, Sliva D, **Garcia JG**, and English D. Serum factors involved in human microvascular endothelial cell morphogenesis. *J Laboratory Clinical Medicine,* 140(3): 188-198. PMID: 12271276. 2002b.

152. Dudek SM, Birukov KG, Zhan X, and **Garcia JG**. Novel interaction of cortactin with endothelial cell myosin light chain kinase. *Biochemical Biophysical Research Communications,* 298(4): 511-519. PMID: 12408982. 2002.

153. Bogatcheva NV, **Garcia JG**, and Verin AD. Role of tyrosine kinase signaling in endothelial cell barrier regulation. *Vascular Pharmacology,* 39(4-5): 201-212. PMID: 12747960. 2002b.

154. Parinandi NL, Kleinberg MA, Usatyuk PV, Cummings RJ, Pennathur A, Cardounel AJ, Zweier JL, **Garcia JG**, and Natarajan V. Hyperoxia-induced NAD(P)H oxidase activation and regulation by MAP kinases in human lung endothelial cells. *American J Physiology: Lung Cell Molecular Physiology,* 284(1): L26-38. PMID: 12388366. 2003.

155. Shikata Y, Birukov KG, and **Garcia JG**. S1P induces FA remodeling in human pulmonary endothelial cells: role of Rac, GIT1, FAK, and paxillin. *J Applied Physiology,* 94(3): 1193-1203. PMID: 12482769. 2003a.

156. Wadgaonkar R, Nurmukhambetova S, Zaiman AL, and **Garcia JG**. Mutation analysis of the non-muscle myosin light chain kinase (MLCK) deletion constructs on CV1 fibroblast contractile activity and proliferation. *J Cellular Biochemistry,* 88(3): 623-634. PMID: 12532337. 2003.

157. Schaphorst KL, Chiang E, Jacobs KN, Zaiman A, Natarajan V, Wigley F, and **Garcia JG**. Role of sphingosine-1 phosphate in the enhancement of endothelial barrier integrity by platelet-released products. *American J Physiology: Lung Cell Molecular Physiology,* 285(1): L258-267. PMID: 12626332. 2003.

158. Petrache I, Birukov K, Zaiman AL, Crow MT, Deng H, Wadgaonkar R, Romer LH, and **Garcia JG**. Caspase-dependent cleavage of myosin light chain kinase (MLCK) is involved in TNF-alpha-mediated bovine pulmonary endothelial cell apoptosis. *Faseb J,* 17(3): 407-416. PMID: 12631580. 2003a.

159. Birukov KG, Jacobson JR, Flores AA, Ye SQ, Birukova AA, Verin AD, and **Garcia JG**. Magnitude-dependent regulation of pulmonary endothelial cell barrier function by cyclic stretch. *American J Physiology: Lung Cell Molecular Physiology,* 285(4): L785-797. PMID: 12639843. 2003.

160. Becker PM, Kazi AA, Wadgaonkar R, Pearse DB, Kwiatkowski D, and **Garcia JG**. Pulmonary vascular permeability and ischemic injury in gelsolin-deficient mice. *American J Respiratory Cell Molecular Biology,* 28(4): 478-484. PMID: 12654637. 2003.

161. D'Amore P, and **Garcia JGN**. Dawn of a new millennium. *Microvascular Research,* 65(1): 1. PMID. 2003.

162. Petrache I, Birukova A, Ramirez SI, **Garcia JG**, and Verin AD. The role of the microtubules in tumor necrosis factor-alpha-induced endothelial cell permeability. *American J Respiratory Cell Molecular Biology,* 28(5): 574-581. PMID: 12707013. 2003b.

163. Cappola TP, Cope L, Cernetich A, Barouch LA, Minhas K, Irizarry RA, Parmigiani G, Durrani S, Lavoie T, Hoffman EP, Ye SQ, **Garcia JG**, and Hare JM. Deficiency of different nitric oxide synthase isoforms activates divergent transcriptional programs in cardiac hypertrophy. *Physiologic Genomics,* 14(1): 25-34. PMID: 12709511. 2003.

164. Bogatcheva NV, Verin AD, Wang P, Birukova AA, Birukov KG, Mirzopoyazova T, Adyshev DM, Chiang ET, Crow MT, and **Garcia JG**. Phorbol esters increase MLC phosphorylation and actin remodeling in bovine lung endothelium without increased contraction. *American J Physiology: Lung Cell Molecular Physiology,* 285(2): L415-426. PMID: 12740219. 2003a.

165. Girgis RE, Li D, Zhan X, **Garcia JG**, Tuder RM, Hassoun PM, and Johns RA. Attenuation of chronic hypoxic pulmonary hypertension by simvastatin. *American J Physiology: Heart Circulatory Physiology,* 285(3): H938-945. PMID: 12750068. 2003.

166. Dull RO, Dinavahi R, Schwartz L, Humphries DE, Berry D, Sasisekharan R, and **Garcia JG**. Lung endothelial heparan sulfates mediate cationic peptide-induced barrier dysfunction: a new role for the glycocalyx. *American J Physiology: Lung Cell Molecular Physiology,* 285(5): L986-995. PMID: 12754183. 2003.

167. Petrache I, Crow MT, Neuss M, and **Garcia JG**. Central involvement of Rho family GTPases in TNF-alpha-mediated bovine pulmonary endothelial cell apoptosis. *Biochemical Biophysical Research Communication,* 306(1): 244-249. PMID: 12788095. 2003c.

168. Borbiev T, Verin AD, Birukova A, Liu F, Crow MT, and **Garcia JG**. Role of CaM kinase II and ERK activation in thrombin-induced endothelial cell barrier dysfunction. *American J Physiology: Lung Cell Molecular Physiology,* 285(1): L43-54. PMID: 12788788. 2003a.

169. Usatyuk PV, Fomin VP, Shi S, **Garcia JG**, Schaphorst K, and Natarajan V. Role of Ca2+ in diperoxovanadate-induced cytoskeletal remodeling and endothelial cell barrier function. *American J Physiology: Lung Cell Molecular Physiology,* 285(5): L1006-1017. PMID: 12882766. 2003.

170. Peri S, Navarro JD, Amanchy R, Kristiansen TZ, Jonnalagadda CK, Surendranath V, Niranjan V, Muthusamy B, Gandhi TK, Gronborg M, Ibarrola N, Deshpande N, Shanker K, Shivashankar HN, Rashmi BP, Ramya MA, Zhao Z, Chandrika KN, Padma N, Harsha HC, Yatish AJ, Kavitha MP, Menezes M, Choudhury DR, Suresh S, Ghosh N, Saravana R, Chandran S, Krishna S, Joy M, Anand SK, Madavan V, Joseph A, Wong GW, Schiemann WP, Constantinescu SN, Huang L, Khosravi-Far R, Steen H, Tewari M, Ghaffari S, Blobe GC, Dang CV, **Garcia JG**, Pevsner J, Jensen ON, Roepstorff P, Deshpande KS, Chinnaiyan AM, Hamosh A, Chakravarti A, and Pandey A. Development of human

protein reference database as an initial platform for approaching systems biology in humans. *Genome Research,* 13(10): 2363-2371. PMID: 14525934. 2003.

171. Kolosova I, Csortos C, **Garcia JGN**, and Verin AD. Role of Ser/Thr protein phosphatases in endothelial cytoskeletal organization and barrier function. *Recent Research Developments Physiology,* 1: 385-400. PMID. 2003.

172. Jacobson JR, and **Garcia JG**. Genomics made functional in ventilator-associated lung injury. *American J Respiratory Critical Care Medicine,* 168(9): 1023-1025. PMID: 14581285. 2003.

173. Dudek SM, and **Garcia JG**. Rho family of guanine exchange factors (GEFs) in cellular activation: who's dancing? And with whom? *Circulation Research,* 93(9): 794-795. PMID: 14592993. 2003.

174. Borbiev T, **Garcia JG**, and Verin AD. [Role of phosphorylation of myosin and actin-binding proteins in endothelial permeability induced by thrombin]. *Bioorganica Khimica (Russia),* 29(5): 510-517. PMID: 14601407. 2003b.

175. Shikata Y, Birukov KG, Birukova AA, Verin A, and **Garcia JG**. Involvement of site-specific FAK phosphorylation in sphingosine-1 phosphate- and thrombin-induced focal adhesion remodeling: role of Src and GIT. *Faseb J,* 17(15): 2240-2249. PMID: 14656986. 2003b.

176. Bogatcheva NV, Dudek SM, **Garcia JG**, and Verin AD. Mitogen-activated protein kinases in endothelial pathophysiology. *J Investigative Medicine,* 51(6): 341-352. PMID: 14686637. 2003b.

177. Jacobson JR, Dudek SM, Birukov KG, Ye SQ, Grigoryev DN, Girgis RE, and **Garcia JG**. Cytoskeletal activation and altered gene expression in endothelial barrier regulation by simvastatin. *American J Respiratory Cell Molecular Biology,* 30(5): 662-670. PMID: 14630613. 2004.

178. Birukov KG, Leitinger N, Bochkov VN, and **Garcia JG**. Signal transduction pathways activated in human pulmonary endothelial cells by OxPAPC, a bioactive component of oxidized lipoproteins. *Microvascular Research,* 67(1): 18-28. PMID: 14709399. 2004a.

179. Birukova AA, Smurova K, Birukov KG, Kaibuchi K, **Garcia JG**, and Verin AD. Role of Rho GTPases in thrombin-induced lung vascular endothelial cells barrier dysfunction. *Microvascular Research,* 67(1): 64-77. PMID: 14709404. 2004a.

180. Birukova AA, Liu F, **Garcia JG**, and Verin AD. Protein kinase A attenuates endothelial cell barrier dysfunction induced by microtubule disassembly. *American J Physiology: Lung Cell Molecular Physiology,* 287(1): L86-93. PMID: 15003930. 2004b.

181. Peng X, Hassoun PM, Sammani S, McVerry BJ, Burne MJ, Rabb H, Pearse D, Tuder RM, and **Garcia JG**. Protective effects of sphingosine 1-phosphate in murine endotoxin-induced inflammatory lung injury. *American J Respiratory Critical Care Medicine,* 169(11): 1245-1251. PMID: 15020292. 2004.

182. Dudek SM, Jacobson JR, Chiang ET, Birukov KG, Wang P, Zhan X, and **Garcia JG**. Pulmonary endothelial cell barrier enhancement by sphingosine 1-phosphate: roles for cortactin and myosin light chain kinase. *J Biological Chemistry,* 279(23): 24692-24700. PMID: 15056655. 2004.

183. Grigoryev DN, Ma SF, Irizarry RA, Ye SQ, Quackenbush J, and **Garcia JG**. Orthologous gene-expression profiling in multi-species models: search for candidate genes. *Genome Biology,* 5(5): R34. PMID: 15128448. 2004a.

184. Tar K, Birukova AA, Csortos C, Bako E, **Garcia JG**, and Verin AD. Phosphatase 2A is involved in endothelial cell microtubule remodeling and barrier regulation. *J Cellular Biochemistry,* 92(3): 534-546. PMID: 15156565. 2004.

185. Newman JH, Fanburg BL, Archer SL, Badesch DB, Barst RJ, **Garcia JG**, Kao PN, Knowles JA, Loyd JE, McGoon MD, Morse JH, Nichols WC, Rabinovitch M, Rodman DM, Stevens T, Tuder RM, Voelkel NF, and Gail DB. Pulmonary arterial hypertension: future directions: report of a National Heart, Lung and Blood Institute/Office of Rare Diseases workshop. *Circulation,* 109(24): 2947-2952. PMID: 15210611. 2004.

186. Wadgaonkar R, Pierce JW, Somnay K, Damico RL, Crow MT, Collins T, and **Garcia JG**. Regulation of c-Jun N-terminal kinase and p38 kinase pathways in endothelial cells. *American J Respiratory Cell Molecular Biology,* 31(4): 423-431. PMID: 15231489. 2004.

187. Kolosova IA, Ma SF, Adyshev DM, Wang P, Ohba M, Natarajan V, **Garcia JG**, and Verin AD. Role of CPI-17 in the regulation of endothelial cytoskeleton. *American J Physiology: Lung Cell Molecular Physiology,* 287(5): L970-980. PMID: 15234908. 2004.

188. Li Y, Uruno T, Haudenschild C, Dudek SM, **Garcia JG**, and Zhan X. Interaction of cortactin and Arp2/3 complex is required for sphingosine-1-phosphate-induced endothelial cell remodeling. *Experimental Cell Research,* 298(1): 107-121. PMID: 15242766. 2004.

189. Atwood CW, Jr., McCrory D, **Garcia JG**, Abman SH, and Ahearn GS. Pulmonary artery hypertension and sleep-disordered breathing: ACCP evidence-based clinical practice guidelines. *Chest,* 126(1 Suppl): 72S-77S. PMID: 15249496. 2004.

190. McVerry BJ, and **Garcia JG**. (Journal Cover). Endothelial cell barrier regulation by sphingosine 1-phosphate. *J Cellular Biochemistry,* 92(6): 1075-1085. PMID: 15258893. 2004.

191. Cummings R, Zhao Y, Jacoby D, Spannhake EW, Ohba M, **Garcia JG**, Watkins T, He D, Saatian B, and Natarajan V. Protein kinase Cdelta mediates lysophosphatidic acid-induced NF-kappaB activation and interleukin-8 secretion in human bronchial epithelial cells. *J Biological Chemistry,* 279(39): 41085-41094. PMID: 15280372. 2004.

192. Birukova AA, Smurova K, Birukov KG, Usatyuk P, Liu F, Kaibuchi K, Ricks-Cord A, Natarajan V, Alieva I, **Garcia JG**, and Verin AD. Microtubule disassembly induces cytoskeletal remodeling and lung vascular barrier dysfunction: role of Rho-dependent mechanisms. *J Cellular Physiology,* 201(1): 55-70. PMID: 15281089. 2004c.

193. **Garcia JGN**, Nonas S, Kawkitinarong K, and Barnes KC. Functional genomics of lung disease: SNPs, chips, and functional genomics of acute lung injury. *American J Respiratory Cell Molecular Biology* 31(2 Suppl): S18. PMID: 15269003. 2004.

194. McVerry BJ, Peng X, Hassoun PM, Sammani S, Simon BA, and **Garcia JG**. Sphingosine 1-phosphate reduces vascular leak in murine and canine models of acute lung injury. *American J Respiratory Critical Care Medicine,* 170(9): 987-993. PMID: 15282202. 2004.

195. Kawkitinarong K, Linz-McGillem L, Birukov KG, and **Garcia JG**. Differential regulation of human lung epithelial and endothelial barrier function by thrombin. *American J Respiratory Cell Molecular Biology,* 31(5): 517-527. PMID: 15284075. 2004.

196. Birukov KG, Bochkov VN, Birukova AA, Kawkitinarong K, Rios A, Leitner A, Verin AD, Bokoch GM, Leitinger N, and **Garcia JG**. Epoxycyclopentenone-containing oxidized phospholipids restore endothelial barrier function via Cdc42 and Rac. *Circulation Research,* 95(9): 892-901. PMID: 15472119. 2004b.

197. Borbiev T, Birukova A, Liu F, Nurmukhambetova S, Gerthoffer WT, **Garcia JG**, and Verin AD. p38 MAP kinase-dependent regulation of endothelial cell permeability. *American J Physiology: Lung Cell Molecular Physiology,* 287(5): L911-918. PMID: 15475493. 2004.

198. Clayburgh DR, Rosen S, Witkowski ED, Wang F, Blair S, Dudek S, **Garcia JG**, Alverdy JC, and Turner JR. A differentiation-dependent splice variant of myosin light chain kinase, MLCK1, regulates epithelial tight junction permeability. *J Biological Chemistry,* 279(53): 55506-55513. PMID: 15507455. 2004.

199. Kittleson MM, Ye SQ, Irizarry RA, Minhas KM, Edness G, Conte JV, Parmigiani G, Miller LW, Chen Y, Hall JL, **Garcia JG**, and Hare JM. Identification of a gene expression profile that differentiates between ischemic and nonischemic cardiomyopathy. *Circulation,* 110(22): 3444-3451. PMID: 15557369. 2004.

200. Grigoryev DN, Finigan JH, Hassoun P, and **Garcia JG**. Science review: searching for gene candidates in acute lung injury. *Critical Care,* 8(6): 440-447. PMID: 15566614. 2004b.

201. Birukova AA, Birukov KG, Smurova K, Adyshev D, Kaibuchi K, Alieva I, **Garcia JG**, and Verin AD. Novel role of microtubules in thrombin-induced endothelial barrier dysfunction. *Faseb J,* 18(15): 1879-1890. PMID: 15576491. 2004d.

202. Linz-McGillem LA, Moitra J, and **Garcia JG**. (Journal Cover). Cytoskeletal rearrangement and caspase activation in sphingosine 1-phosphate-induced lung capillary tube formation. *Stem Cells Development,* 13(5): 496-508. PMID: 15588507. 2004.

203. Smurova KM, Biriukova AA, **Garcia JG**, Vorob'ev IA, Alieva IB, and Verin AD. [Reorganization of microtubule system in pulmonary endothelial cells in response to thrombin treatment]. *Tsitologiia (Russia),* 46(8): 695-703. PMID: 15598015. 2004.

204. Manalo DJ, Rowan A, Lavoie T, Natarajan L, Kelly BD, Ye SQ, **Garcia JG**, and Semenza GL. Transcriptional regulation of vascular endothelial cell responses to hypoxia by HIF-1. *Blood,* 105(2): 659-669. PMID: 15374877. 2005.

205. McVerry BJ, and **Garcia JG**. In vitro and in vivo modulation of vascular barrier integrity by sphingosine 1-phosphate: mechanistic insights. *Cell Signaling,* 17(2): 131-139. PMID: 15494205. 2005.

206. Mirzapoiazova T, Kolosova IA, Romer L, **Garcia JG**, and Verin AD. The role of caldesmon in the regulation of endothelial cytoskeleton and migration. *J Cellular Physiology,* 203(3): 520-528. PMID: 15521070. 2005.

207. Wadgaonkar R, Linz-McGillem L, Zaiman AL, and **Garcia JG**. Endothelial cell myosin light chain kinase (MLCK) regulates TNFalpha-induced NFkappaB activity. *J Cellular Biochemistry,* 94(2): 351-364. PMID: 15526279. 2005a.

208. Ye SQ, Simon BA, Maloney JP, Zambelli-Weiner A, Gao L, Grant A, Easley RB, McVerry BJ, Tuder RM, Standiford T, Brower RG, Barnes KC, and **Garcia JG**. Pre-B-cell colony-enhancing factor as a potential novel biomarker in acute lung injury. *American J Respiratory Critical Care Medicine,* 171(4): 361-370. PMID: 15579727. 2005a.

209. Varadharaj S, Watkins T, Cardounel AJ, **Garcia JG**, Zweier JL, Kuppusamy P, Natarajan V, and Parinandi NL. Vitamin C-induced loss of redox-dependent viability in lung microvascular endothelial cells. *Antioxidant Redox Signaling,* 7(1-2): 287-300. PMID: 15650416. 2005.

210. Jacobson JR, Barnard JW, Grigoryev DN, Ma SF, Tuder RM, and **Garcia JG**. Simvastatin attenuates vascular leak and inflammation in murine inflammatory lung injury. *American J Physiology Lung Cell Molecular Physiology,* 288(6): L1026-1032. PMID: 15665042. 2005.

211. Shikata Y, Rios A, Kawkitinarong K, DePaola N, **Garcia JG**, and Birukov KG. (Journal Cover). Differential effects of shear stress and cyclic stretch on focal adhesion remodeling, site-specific FAK phosphorylation, and small GTPases in human lung endothelial cells. *Experimental Cell Research,* 304(1): 40-49. PMID: 15707572. 2005.

212. Finigan JH, Dudek SM, Singleton PA, Chiang ET, Jacobson JR, Camp SM, Ye SQ, and **Garcia JG**. Activated protein C mediates novel lung endothelial barrier enhancement: role of sphingosine 1-phosphate receptor transactivation. *J Biological Chemistry,* 280(17): 17286-17293. PMID: 15710622. 2005.

213. Nakashima S, Soong TR, Fox-Talbot K, Qian Z, Rahimi S, Wasowska BA, Rohde CA, Chen S, **Garcia JG**, and Baldwin WM. Impact of MHC class II incompatibility on localization of mononuclear cell infiltrates to the bronchiolar compartment of orthotopic lung allografts. *American J Transplantation,* 5(4 Pt 1): 694-701. PMID: 15760392. 2005.

214. Berdyshev EV, Gorshkova IA, **Garcia JG**, Natarajan V, and Hubbard WC. Quantitative analysis of sphingoid base-1-phosphates as bisacetylated derivatives by liquid chromatography-tandem mass spectrometry. *Analytical Biochemistry,* 339(1): 129-136. PMID: 15766719. 2005.

215. Kittleson MM, Minhas KM, Irizarry RA, Ye SQ, Edness G, Breton E, Conte JV, Tomaselli G, **Garcia JG**, and Hare JM. Gene expression analysis of ischemic and nonischemic cardiomyopathy: shared and distinct genes in the development of heart failure. *Physiologic Genomics,* 21(3): 299-307. PMID: 15769906. 2005a.

216. Birukova AA, Birukov KG, Gorshkov B, Liu F, **Garcia JG**, and Verin AD. MAP kinases in lung endothelial permeability induced by microtubule disassembly. *American J Physiology: Lung Cellular Molecular Physiology,* 289(1): L75-84. PMID: 15778245. 2005a.

217. Birukova AA, Birukov KG, Adyshev D, Usatyuk P, Natarajan V, **Garcia JG**, and Verin AD. Involvement of microtubules and Rho pathway in TGF-beta1-induced lung vascular barrier dysfunction. *J Cellular Physiology,* 204(3): 934-947. PMID: 15828024. 2005b.

218. Wadgaonkar R, Dudek SM, Zaiman AL, Linz-McGillem L, Verin AD, Nurmukhambetova S, Romer LH, and **Garcia JG**. Intracellular interaction of myosin light chain kinase with macrophage migration inhibition factor (MIF) in endothelium. *J Cellular Biochemistry,* 95(4): 849-858. PMID: 15838879. 2005b.

219. Irizarry RA, Warren D, Spencer F, Kim IF, Biswal S, Frank BC, Gabrielson E, **Garcia JG**, Geoghegan J, Germino G, Griffin C, Hilmer SC, Hoffman E, Jedlicka AE, Kawasaki E, Martinez-Murillo F, Morsberger L, Lee H, Petersen D, Quackenbush J, Scott A, Wilson M, Yang Y, Ye SQ, and Yu W. Multiple-laboratory comparison of microarray platforms. *Nature Methods,* 2(5): 345-350. PMID: 15846361. 2005.

220. Fenton JW, Brezniak DV, Ofosu FA, Shen GX, Jacobson JR, and **Garcia JG**. Statins and thrombin. *Current Drug Targets Cardiovascular Haematology Disorders,* 5(2): 115-120. PMID: 15853752. 2005.

221. Grigoryev DN, Ma SF, Simon BA, Irizarry RA, Ye SQ, and **Garcia JG**. In vitro identification and in silico utilization of interspecies sequence similarities using GeneChip technology. *BMC Genomics,* 6(1): 62. PMID: 15871745. 2005.

222. Ma SF, Grigoryev DN, Taylor AD, Nonas S, Sammani S, Ye SQ, and **Garcia JG**. Bioinformatic identification of novel early stress response genes in rodent models of lung injury. *American J Physiology: Lung Cellular Molecular Physiology,* 289(3): L468-477. PMID: 15908477. 2005.

223. McGlothlin JR, Gao L, Lavoie T, Simon BA, Easley RB, Ma SF, Rumala BB, **Garcia JG**, and Ye SQ. Molecular cloning and characterization of canine pre-B-cell colony-enhancing factor. *Biochemical Genetics,* 43(3-4): 127-141. PMID: 15934174. 2005.

224. Peng X, Abdulnour RE, Sammani S, Ma SF, Han EJ, Hasan EJ, Tuder R, **Garcia JG**, and Hassoun PM. Inducible nitric oxide synthase contributes to ventilator-induced lung injury. *American J Respiratory Critical Care Medicine,* 172(4): 470-479. PMID: 15937288. 2005.

225. Kittleson MM, Minhas KM, Irizarry RA, Ye SQ, Edness G, Breton E, Conte JV, Tomaselli G, **Garcia JG**, and Hare JM. Gene expression in giant cell myocarditis: Altered expression of immune response genes. *International J Cardiology,* 102(2): 333-340. PMID: 15982506. 2005b.

226. Kolosova IA, Mirzapoiazova T, Adyshev D, Usatyuk P, Romer LH, Jacobson JR, Natarajan V, Pearse DB, **Garcia JG**, and Verin AD. Signaling pathways involved in adenosine triphosphate-induced endothelial cell barrier enhancement. *Circulation Research,* 97(2): 115-124. PMID: 15994434. 2005.

227. Ye SQ, Zhang LQ, Adyshev D, Usatyuk PV, Garcia AN, Lavoie TL, Verin AD, Natarajan V, and **Garcia JG**. Pre-B-cell-colony-enhancing factor is critically involved in thrombin-induced lung endothelial cell barrier dysregulation. *Microvascular Research,* 70(3): 142-151. PMID: 16188281. 2005b.

228. Singleton PA, Dudek SM, Chiang ET, and **Garcia JG**. Regulation of sphingosine 1-phosphate-induced endothelial cytoskeletal rearrangement and barrier enhancement by S1P1 receptor, PI3 kinase, Tiam1/Rac1, and alpha-actinin. *Faseb J,* 19(12): 1646-1656. PMID: 16195373. 2005.

229. Nonas SA, Finigan JH, Gao L, and **Garcia JG**. Functional genomic insights into acute lung injury: role of ventilators and mechanical stress. *Proceedings American Thoracic Society,* 2(3): 188-194. PMID: 16222036. 2005.

230. Guo Y, Ma SF, Grigoryev D, Van Eyk J, and **Garcia JG**. 1-DE MS and 2-D LC-MS analysis of the mouse bronchoalveolar lavage proteome. *Proteomics,* 5(17): 4608-4624. PMID: 16240291. 2005.

231. **Garcia JG**, and Ma SF. Polymerase chain reaction: a landmark in the history of gene technology. *Critical Care Medicine,* 33(12 Suppl): S429-432. PMID: 16340413. 2005.

232. Girgis RE, Ma SF, Ye S, Grigoryev DN, Li D, Hassoun PM, Tuder RM, Johns RA, and **Garcia JG**. Differential gene expression in chronic hypoxic pulmonary hypertension: effect of simvastatin treatment. *Chest,* 128(6 Suppl): 579S. PMID: 16373842. 2005.

233. **Garcia JG**. Searching for candidate genes in acute lung injury: SNPs, Chips and PBEF. *Transactions American Clinical Climatologic Association,* 116: 205-219. PMID: 16555615. 2005.

234. West EE, Lavoie TL, Orens JB, Chen ES, Ye SQ, Finkelman FD, **Garcia JG**, and McDyer JF. Pluripotent allospecific CD8+ effector T cells traffic to lung in murine obliterative airway disease. *American J Respiratory Cell Molecular Biology,* 34(1): 108-118. PMID: 16195540. 2006.

235. Barnes KC, Grant AV, Baltadzhieva D, Zhang S, Berg T, Shao L, Zambelli-Weiner A, Anderson W, Nelsen A, Pillai S, Yarnall DP, Dienger K, Ingersoll RG, Scott AF, Fallin MD, Mathias RA, Beaty TH, **Garcia JG**, and Wills-Karp M. Variants in the gene encoding C3 are associated with asthma and related phenotypes among African Caribbean families. *Genes & Immunity,* 7(1): 27-35. PMID: 16355111. 2006a.

236. Gao L, Grant A, Halder I, Brower R, Sevransky J, Maloney JP, Moss M, Shanholtz C, Yates CR, Meduri GU, Shriver MD, Ingersoll R, Scott AF, Beaty TH, Moitra J, Ma SF, Ye SQ, Barnes KC, and **Garcia JG**. Novel polymorphisms in the myosin light chain kinase gene confer risk for acute lung injury. *American J Respiratory Cell Molecular Biology,* 34(4): 487-495. PMID: 16399953. 2006.

237. Bogatcheva NV, Wang P, Birukova AA, Verin AD, and **Garcia JG**. Mechanism of fluoride-induced MAP kinase activation in pulmonary artery endothelial cells. *American J Physiology: Lung Cell Molecular Physiology,* 290(6): L1139-1145. PMID: 16414982. 2006a.

238. Tar K, Csortos C, Czikora I, Olah G, Ma SF, Wadgaonkar R, Gergely P, **Garcia JG**, and Verin AD. Role of protein phosphatase 2A in the regulation of endothelial cell cytoskeleton structure. *J Cellular Biochemistry,* 98(4): 931-953. PMID: 16475161. 2006.

239. Nonas S, Miller I, Kawkitinarong K, Chatchavalvanich S, Gorshkova I, Bochkov VN, Leitinger N, Natarajan V, **Garcia JG**, and Birukov KG. Oxidized phospholipids reduce vascular leak and inflammation in rat model of acute lung injury. *American J Respiratory Critical Care Medicine,* 173(10): 1130-1138. PMID: 16514111. 2006.

240. Romer LH, Birukov KG, and **Garcia JG**. Focal adhesions: paradigm for a signaling nexus. *Circulation Research,* 98(5): 606-616. PMID: 16543511. 2006.

241. Wright JM, Merlo CA, Reynolds JB, Zeitlin PL, **Garcia JG**, Guggino WB, and Boyle MP. Respiratory epithelial gene expression in patients with mild and severe cystic fibrosis lung disease. *American J Respiratory Cell Molecular Biology,* 35(3): 327-336. PMID: 16614352. 2006.

242. Abdulnour RE, Peng X, Finigan JH, Han EJ, Hasan EJ, Birukov KG, Reddy SP, Watkins JE, 3rd, Kayyali US, **Garcia JG**, Tuder RM, and Hassoun PM. Mechanical stress activates xanthine oxidoreductase through MAP kinase-dependent pathways. *American J Physiology: Lung Cell Molecular Physiology,* 291(3): L345-353. PMID: 16632522. 2006.

243. Birukova AA, Chatchavalvanich S, Rios A, Kawkitinarong K, **Garcia JG**, and Birukov KG. Differential regulation of pulmonary endothelial monolayer integrity by varying degrees of cyclic stretch. *American J Pathology,* 168(5): 1749-1761. PMID: 16651639. 2006.

244. Simon BA, Easley RB, Grigoryev DN, Ma SF, Ye SQ, Lavoie T, Tuder RM, and **Garcia JG**. Microarray analysis of regional cellular responses to local mechanical stress in acute lung injury. *American J Physiology: Lung Cell Molecular Physiology,* 291(5): L851-861. PMID: 16782753. 2006.

245. Chiang ET, Persaud-Sawin DA, Kulkarni S, **Garcia JG**, and Imani F. Bluetongue virus and double-stranded RNA increase human vascular permeability: role of p38 MAPK. *J Clinical Immunology,* 26(4): 406-416. PMID: 16786433. 2006.

246. Barnes KC, Grant A, Gao P, Baltadjieva D, Berg T, Chi P, Zhang S, Zambelli-Weiner A, Ehrlich E, Zardkoohi O, Brummet ME, Stockton M, Watkins T, Gao L, Gittens M, Wills-Karp M, Cheadle C, Beck LA, Beaty TH, Becker KG, **Garcia JG**, and Mathias RA. Polymorphisms in the novel gene acyloxyacyl hydroxylase (AOAH) are associated with asthma and associated phenotypes. *J Allergy Clinical Immunology,* 118(1): 70-77. PMID: 16815140. 2006b.

247. Singleton PA, Lingen MW, Fekete MJ, **Garcia JG**, and Moss J. Methylnaltrexone inhibits opiate and VEGF-induced angiogenesis: role of receptor transactivation. *Microvascular Research,* 72(1-2): 3-11. PMID: 16820176. 2006a.

248. Bonde P, Gao D, Chen L, Moreno-Vinasco L, Jacobson J, **Garcia JGN**, and Wei C. DNA damage and mismatch repair pathway in lung ischemia and reperfusion injury. *J Cardiovascular Renal Research,* 1: 147-152. PMID. 2006.

249. Bogatcheva NV, Birukova A, Borbiev T, Kolosova I, Liu F, **Garcia JG**, and Verin AD. Caldesmon is a cytoskeletal target for PKC in endothelium. *J Cellular Biochemistry,* 99(6): 1593-1605. PMID: 16823797. 2006b.

250. Jacobson JR, Dudek SM, Singleton PA, Kolosova IA, Verin AD, and **Garcia JG**. Endothelial cell barrier enhancement by ATP is mediated by the small GTPase Rac and cortactin. *American J Physiology: Lung Cell Molecular Physiology,* 291(2): L289-295. PMID: 16825658. 2006.

251. Chi PB, Duggal P, Kao WH, Mathias RA, Grant AV, Stockton ML, **Garcia JG**, Ingersoll RG, Scott AF, Beaty TH, Barnes KC, and Fallin MD. Comparison of SNP tagging methods using empirical data: association study of 713 SNPs on chromosome 12q14.3-12q24.21 for asthma and total serum IgE in an African Caribbean population. *Genetic Epidemiology,* 30(7): 609-619. PMID: 16830339. 2006.

252. **Garcia JG**, and Moreno Vinasco L. Genomic insights into acute inflammatory lung injury. *American J Physiology: Lung Cell Molecular Physiology,* 291(6): L1113-1117. PMID: 16877634. 2006.

253. Flores C, Ma SF, Maresso K, Ahmed O, and **Garcia JG**. Genomics of acute lung injury. *Seminars Respiratory Critical Care Medicine,* 27(4): 389-395. PMID: 16909372. 2006.

254. Singleton PA, Dudek SM, Ma SF, and **Garcia JG**. Transactivation of sphingosine 1-phosphate receptors is essential for vascular barrier regulation. Novel role for hyaluronan and CD44 receptor family. *J Biological Chemistry,* 281(45): 34381-34393. PMID: 16963454. 2006b.

255. Papaiahgari S, Yerrapureddy A, Hassoun PM, **Garcia JG**, Birukov KG, and Reddy SP. EGFR-activated signaling and actin remodeling regulate cyclic stretch-induced NRF2-ARE activation. *American J Respiratory Cell Molecular Biology,* 36(3): 304-312. PMID: 17008637. 2007.

256. Grigoryev DN, Ma SF, Shimoda LA, Johns RA, Lee B, and **Garcia JG**. Exon-based mapping of microarray probes: recovering differential gene expression signal in underpowered hypoxia experiment. *Molecular Cellular Probes,* 21(2): 134-139. PMID: 17071053. 2007.

257. Hooper WC, Mensah GA, Haworth SG, Black SM, **Garcia JG**, and Langleben D. Vascular endothelium summary statement V: Pulmonary hypertension and acute lung injury: public health implications. *Vascular Pharmacology,* 46(5): 327-329. PMID: 17197249. 2007.

258. Meyer NJ, and **Garcia JG**. Wading into the genomic pool to unravel acute lung injury genetics. *Proceedings American Thoracic Society,* 4(1): 69-76. PMID: 17202294. 2007.

259. Guo Y, Singleton PA, Rowshan A, Gucek M, Cole RN, Graham DR, Van Eyk JE, and **Garcia JG**. Quantitative proteomics analysis of human endothelial cell membrane rafts: evidence of MARCKS and MRP regulation in the sphingosine 1-phosphate-induced barrier enhancement. *Molecular Cellular Proteomics,* 6(4): 689-696. PMID: 17210631. 2007.

260. Flores C, Ma SF, Maresso K, Ober C, and **Garcia JG**. A variant of the myosin light chain kinase gene is associated with severe asthma in African Americans. *Genetic Epidemiology,* 31(4): 296-305. PMID: 17266121. 2007.

261. Zhao Y, Kalari SK, Usatyuk PV, Gorshkova I, He D, Watkins T, Brindley DN, Sun C, Bittman R, **Garcia JG**, Berdyshev EV, and Natarajan V. Intracellular generation of sphingosine 1-phosphate in human lung endothelial cells: role of lipid phosphate phosphatase-1 and sphingosine kinase 1. *J Biological Chemistry,* 282(19): 14165-14177. PMID: 17379599. 2007.

262. Singleton PA, Moreno-Vinasco L, Sammani S, Wanderling SL, Moss J, and **Garcia JG**. Attenuation of vascular permeability by methylnaltrexone: role of mOP-R and S1P3 transactivation. *American J Respiratory Cell Molecular Biology,* 37(2): 222-231. PMID: 17395891. 2007a.

263. Jacobson JR, and **Garcia JG**. Novel therapies for microvascular permeability in sepsis. *Current Drug Targets,* 8(4): 509-514. PMID: 17430121. 2007.

264. Nonas SA, Moreno-Vinasco L, Ma SF, Jacobson JR, Desai AA, Dudek SM, Flores C, Hassoun PM, Sam L, Ye SQ, Moitra J, Barnard J, Grigoryev DN, Lussier YA, and **Garcia JG**. Use of consomic rats for genomic insights into ventilator-associated lung injury. *American J Physiology: Lung Cell Molecular Physiology,* 293(2): L292-302. PMID: 17468131. 2007.

265. Gao L, Grant AV, Rafaels N, Stockton-Porter M, Watkins T, Gao P, Chi P, Munoz M, Watson H, Dunston G, Togias A, Hansel N, Sevransky J, Maloney JP, Moss M, Shanholtz C, Brower R, **Garcia JG,** Grigoryev DN, Cheadle C, Beaty TH, Mathias RA, and Barnes KC. Polymorphisms in the myosin light chain kinase gene that confer risk of severe sepsis are associated with a lower risk of asthma. *J Allergy Clinical Immunology,* 119(5): 1111-1118. PMID: 17472811. 2007a.

266. Dudek SM, Camp SM, Chiang ET, Singleton PA, Usatyuk PV, Zhao Y, Natarajan V, and **Garcia JG**. Pulmonary endothelial cell barrier enhancement by FTY720 does not require the S1P1 receptor. *Cellular Signaling,* 19(8): 1754-1764. PMID: 17475445. 2007.

267. Mirzapoiazova T, Kolosova IA, Moreno L, Sammani S, **Garcia JG**, and Verin AD. Suppression of endotoxin-induced inflammation by taxol. *European Respiratory J,* 30(3): 429-435. PMID: 17537765. 2007.

268. Usatyuk PV, Romer LH, He D, Parinandi NL, Kleinberg ME, Zhan S, Jacobson JR, Dudek SM, Pendyala S, **Garcia JG**, and Natarajan V. Regulation of hyperoxia-induced NADPH oxidase activation in human lung endothelial cells by the actin cytoskeleton and cortactin. *J Biological Chemistry,* 282(32): 23284-23295. PMID: 17562703. 2007.

269. Gao L, Flores C, Fan-Ma S, Miller EJ, Moitra J, Moreno L, Wadgaonkar R, Simon B, Brower R, Sevransky J, Tuder RM, Maloney JP, Moss M, Shanholtz C, Yates CR, Meduri GU, Ye SQ, Barnes KC, and **Garcia JG**. Macrophage migration inhibitory factor in acute lung injury: expression, biomarker, and associations. *Translational Research,* 150(1): 18-29. PMID: 17585860. 2007b.

270. Singleton PA, Salgia R, Moreno-Vinasco L, Moitra J, Sammani S, Mirzapoiazova T, and **Garcia JG**. CD44 regulates hepatocyte growth factor-mediated vascular integrity. Role of c-Met, Tiam1/Rac1, dynamin 2, and cortactin. *J Biological Chemistry,* 282(42): 30643-30657. PMID: 17702746. 2007b.

271. Moitra J, Sammani S, and **Garcia JG**. Re-evaluation of Evans Blue dye as a marker of albumin clearance in murine models of acute lung injury. *Translational Research,* 150(4): 253-265. PMID: 17900513. 2007.

272. Kolosova IA, Mirzapoiazova T, Moreno-Vinasco L, Sammani S, **Garcia JG**, and Verin AD. Protective effect of purinergic agonist ATPgammaS against acute lung injury. *American J Physiology: Lung Cell Molecular Physiology,* 294(2): L319-324. PMID: 17993588. 2008.

273. Cai H, Liu D, and **Garcia JG**. CaM Kinase II-dependent pathophysiological signalling in endothelial cells. *Cardiovascular Research,* 77(1): 30-34. PMID: 18006482. 2008.

274. Archer SL, Gomberg-Maitland M, Maitland ML, Rich S, **Garcia JG**, and Weir EK. Mitochondrial metabolism, redox signaling, and fusion: a mitochondria-ROS-HIF-1alpha-Kv1.5 O2-sensing pathway at the intersection of pulmonary hypertension and cancer. *American J Physiology: Heart Circulatory Physiology,* 294(2): H570-578. PMID: 18083891. 2008.

275. Damico RL, Chesley A, Johnston L, Bind EP, Amaro E, Nijmeh J, Karakas B, Welsh L, Pearse DB, **Garcia JG**, and Crow MT. Macrophage migration inhibitory factor governs endothelial cell sensitivity to LPS-induced apoptosis. *American J Respiratory Cell Molecular Biology,* 39(1): 77-85. PMID: 18239193. 2008.

276. Moitra J, Evenoski C, Sammani S, Wadgaonkar R, Turner JR, Ma SF, and **Garcia JG**. A transgenic mouse with vascular endothelial over-expression of the non-muscle myosin light chain kinase-2 isoform is susceptible to inflammatory lung injury: role of sexual dimorphism and age. *Translational Research,* 151(3): 141-153. PMID: 18279813. 2008.

277. Gorshkova I, He D, Berdyshev E, Usatuyk P, Burns M, Kalari S, Zhao Y, Pendyala S, **Garcia JG**, Pyne NJ, Brindley DN, and Natarajan V. Protein kinase C-epsilon regulates sphingosine 1-phosphate-mediated migration of human lung endothelial cells through activation of phospholipase D2, protein kinase C-zeta, and Rac1. *J Biological Chemistry,* 283(17): 11794-11806. PMID: 18296444. 2008.

278. Moreno-Vinasco L, Gomberg-Maitland M, Maitland ML, Desai AA, Singleton PA, Sammani S, Sam L, Liu Y, Husain AN, Lang RM, Ratain MJ, Lussier YA, and **Garcia JG**. Genomic assessment of a multikinase inhibitor, sorafenib, in a rodent model of pulmonary hypertension. *Physiologic Genomics,* 33(2): 278-291. PMID: 18303084. 2008a.

279. Moreno-Vinasco L, Jacobson JR, Bonde P, Sammani S, Mirzapoiazova T, Vigneswaran WT, and **Garcia JG**. Attenuation of rodent lung ischemia-reperfusion injury by sphingosine 1-phosphate. *J Organ Dysfunction,* 4(2): 106 - 114. PMID. 2008b.

280. Nonas S, Birukova AA, Fu P, Xing J, Chatchavalvanich S, Bochkov VN, Leitinger N, **Garcia JG**, and Birukov KG. Oxidized phospholipids reduce ventilator-induced vascular leak and inflammation in vivo. *Critical Care,* 12(1): R27. PMID: 18304335. 2008.

281. Neptune ER, Podowski M, Calvi C, Cho JH, **Garcia JG**, Tuder R, Linnoila RI, Tsai MJ, and Dietz HC. Targeted disruption of NeuroD, a proneural basic helix-loop-helix factor, impairs distal lung formation and neuroendocrine morphology in the neonatal lung. *J Biological Chemistry,* 283(30): 21160-21169. PMID: 18339630. 2008.

282. Desai AA, Hysi P, and **Garcia JG**. Integrating genomic and clinical medicine: searching for susceptibility genes in complex lung diseases. *Translational Research,* 151(4): 181-193. PMID: 18355765. 2008.

283. Grigoryev DN, Mathai SC, Fisher MR, Girgis RE, Zaiman AL, Housten-Harris T, Cheadle C, Gao L, Hummers LK, Champion HC, **Garcia JG**, Wigley FM, Tuder RM, Barnes KC, and Hassoun PM.

Identification of candidate genes in scleroderma-related pulmonary arterial hypertension. *Translational Research,* 151(4): 197-207. PMID: 18355767. 2008.

284. Kamp R, Sun X, and **Garcia JG**. Making genomics functional: deciphering the genetics of acute lung injury. *Proceedings American Thoracic Society,* 5(3): 348-353. PMID: 18403332. 2008.

285. Arce FT, Whitlock JL, Birukova AA, Birukov KG, Arnsdorf MF, Lal R, **Garcia JG**, and Dudek SM. Regulation of the micromechanical properties of pulmonary endothelium by S1P and thrombin: role of cortactin. *Biophysical J,* 95(2): 886-894. PMID: 18408039. 2008.

286. Zhang LQ, Adyshev DM, Singleton P, Li H, Cepeda J, Huang SY, Zou X, Verin AD, Tu J, **Garcia JG**, and Ye SQ. Interactions between PBEF and oxidative stress proteins - A potential new mechanism underlying PBEF in the pathogenesis of acute lung injury. *FEBS Letters,* 582(13): 1802-1808. PMID: 18486613. 2008a.

287. Ma SF, Flores C, Wade MS, Dudek SM, Nicolae DL, Ober C, and **Garcia JG**. A common cortactin gene variation confers differential susceptibility to severe asthma. *Genetic Epidemiology,* 32(8): 757-766. PMID: 18521921. 2008.

288. Singleton PA, **Garcia JG**, and Moss J. Synergistic effects of methylnaltrexone with 5-fluorouracil and bevacizumab on inhibition of vascular endothelial growth factor-induced angiogenesis. *Molecular Cancer Therapeutics,* 7(6): 1669-1679. PMID: 18566238. 2008.

289. Flores C, Ma SF, Maresso K, Wade MS, Villar J, and **Garcia JG**. IL-6 gene-wide haplotype is associated with susceptibility to acute lung injury. *Translational Research,* 152(1): 11-17. PMID: 18593632. 2008.

290. Wurfel MM, Gordon AC, Holden TD, Radella F, Strout J, Kajikawa O, Ruzinski JT, Rona G, Black RA, Stratton S, Jarvik GP, Hajjar AM, Nickerson DA, Rieder M, Sevransky J, Maloney JP, Moss M, Martin G, Shanholtz C, **Garcia JG**, Gao L, Brower R, Barnes KC, Walley KR, Russell JA, and Martin TR. Toll-like receptor 1 polymorphisms affect innate immune responses and outcomes in sepsis. *American J Respiratory Critical Care Medicine,* 178(7): 710-720. PMID: 18635889. 2008.

291. Hong SB, Huang Y, Moreno-Vinasco L, Sammani S, Moitra J, Barnard JW, Ma SF, Mirzapoiazova T, Evenoski C, Reeves RR, Chiang ET, Lang GD, Husain AN, Dudek SM, Jacobson JR, Ye SQ, Lussier YA, and **Garcia JG**. Essential role of pre-B-cell colony enhancing factor in ventilator-induced lung injury. *American J Respiratory Critical Care Medicine,* 178(6): 605-617. PMID: 18658108. 2008.

292. Chen W, Pendyala S, Natarajan V, **Garcia JG**, and Jacobson JR. Endothelial cell barrier protection by simvastatin: GTPase regulation and NADPH oxidase inhibition. *American J Physiology: Lung Cell Molecular Physiology,* 295(4): L575-583. PMID: 18658277. 2008.

293. Wadgaonkar R, Somnay K, and **Garcia JG**. Thrombin induced secretion of macrophage migration inhibitory factor (MIF) and its effect on nuclear signaling in endothelium. *J Cellular Biochemistry,* 105(5): 1279-1288. PMID: 18821572. 2008.

294. Christie JD, Ma SF, Aplenc R, Li M, Lanken PN, Shah CV, Fuchs B, Albelda SM, Flores C, and **Garcia JG**. Variation in the myosin light chain kinase gene is associated with development of acute lung injury after major trauma. *Critical Care Medicine,* 36(10): 2794-2800. PMID: 18828194. 2008.

295. Szczepaniak WS, Zhang Y, Hagerty S, Crow MT, Kesari P, **Garcia JG**, Choi AM, Simon BA, and McVerry BJ. Sphingosine 1-phosphate rescues canine LPS-induced acute lung injury and alters systemic

inflammatory cytokine production in vivo. *Translational Research,* 152(5): 213-224. PMID: 19010292. 2008.

296. Wang T, Moreno-Vinasco L, Huang Y, Lang GD, Linares JD, Goonewardena SN, Grabavoy A, Samet JM, Geyh AS, Breysse PN, Lussier YA, Natarajan V, and **Garcia JG**. Murine lung responses to ambient particulate matter: genomic analysis and influence on airway hyperresponsiveness. *Environmental Health Perspectives,* 116(11): 1500-1508. PMID: 19057703. 2008.

297. Singleton P, and **Garcia JG**. Stretching the search for therapeutic targets in acute lung injury. *Translational Research,* 152(6): 255-256. PMID: 19059159. 2008.

298. Zhang LQ, Ma SF, Grigoryev D, Lavoie TL, Xiao HQ, Setterquist R, Li H, Jacobson J, **Garcia JG**, and Ye SQ. Temporal gene expression analysis of human coronary artery endothelial cells treated with simvastatin. *Gene Expression,* 14(4): 229-239. PMID: 19110722. 2008b.

299. Zhao Y, Usatyuk PV, Gorshkova IA, He D, Wang T, Moreno-Vinasco L, Geyh AS, Breysse PN, Samet JM, Spannhake EW, **Garcia JG**, and Natarajan V. Regulation of COX-2 expression and IL-6 release by particulate matter in airway epithelial cells. *American J Respiratory Cell Molecular Biology,* 40(1): 19-30. PMID: 18617679. 2009a.

300. Calfee CS, Eisner MD, Parsons PE, Thompson BT, Conner ER, Jr., Matthay MA, Ware LB, and ARDS-Network. (**J. G. Garcia**, Protocol Review Committee Chair). Soluble intercellular adhesion molecule-1 and clinical outcomes in patients with acute lung injury. *Intensive Care Medicine,* 35(2): 248-257. PMID: 18670758. 2009.

301. Birukova AA, Arce FT, Moldobaeva N, Dudek SM, **Garcia JG**, Lal R, and Birukov KG. Endothelial permeability is controlled by spatially defined cytoskeletal mechanics: Atomic force microscopy force mapping of pulmonary endothelial monolayer. *Nanomedicine,* 5(1): 30-41. PMID: 18824415. 2009.

302. Pendyala S, Usatyuk P, Gorshkova IA, **Garcia JG**, and Natarajan V. Regulation of NADPH oxidase in vascular endothelium: The Role of phospholipases, protein kinases, and cytoskeletal proteins. *Antioxidant Redox Signaling,* 11(4): 841–860. PMID: 18828698. 2009.

303. Liu P, Li H, Cepeda J, Zhang LQ, Cui X, **Garcia JG**, and Ye SQ. Critical role of PBEF expression in pulmonary cell inflammation and permeability. *Cell Biology International,* 33(1): 19-30. PMID: 18996492. 2009.

304. Fu P, Birukova AA, Xing J, Sammani S, Murley JS, **Garcia JG**, Grdina DJ, and Birukov KG. Amifostine reduces lung vascular permeability via suppression of inflammatory signalling. *European Respiratory J,* 33(3): 612-624. PMID: 19010997. 2009.

305. Erickson SE, Shlipak MG, Martin GS, Wheeler AP, Ancukiewicz M, Matthay MA, Eisner MD, and Network tNACT. (**JG Garcia**, Protocol Review Committee Chair). Racial and ethnic disparities in mortality from acute lung injury. *Critical Care Medicine,* 37(1): 1-6. PMID: 19050621. 2009.

306. Berdyshev EV, Gorshkova I, Skobeleva A, Bittman R, Lu X, Dudek SM, Mirzapoiazova T, **Garcia JG,** and Natarajan V. FTY720 inhibits ceramide synthases and up-regulates dihydrosphingosine 1-phosphate formation in human lung endothelial cells. *J Biological Chemistry,* 284(9): 5467-5477. PMID: 19119142. 2009.

307. Chiang ET, Camp SM, Dudek SM, Brown ME, Usatyuk PV, Zaborina O, Alverdy JC, and **Garcia JG**. Protective effects of high-molecular weight Polyethylene Glycol (PEG) in human lung endothelial cell

barrier regulation: Role of actin cytoskeletal rearrangement. *Microvascular Research,* 77(2): 174-186. PMID: 19121327. 2009.

308. Meyer NJ, Huang Y, Singleton PA, Sammani S, Moitra J, Evenoski CL, Husain AN, Mitra S, Moreno-Vinasco L, Jacobson JR, Lussier YA, and **Garcia JG**. GADD45a is a novel candidate gene in inflammatory lung injury via influences on Akt signaling. *Faseb J,* 23(5): 1325-1337. PMID: 19124556. 2009.

309. Wadgaonkar R, Patel V, Grinkina N, Romano C, Liu J, Zhao Y, Sammani S, **Garcia JG**, and Natarajan V. Differential regulation of sphingosine kinases 1 and 2 in lung injury. *American J Physiology: Lung Cell Molecular Physiology,* 296(4): L603-613. PMID: 19168577. 2009.

310. **Garcia JG**. (Journal Cover). Concepts in microvascular endothelial barrier regulation in health and disease. *Microvascular Research,* 77(1): 1-3. PMID: 19232241. 2009.

311. Singleton PA, Moss J, **Garcia JG**. Methylnaltrexone potentiates the antiangiogenic effects of the mTOR inhibitor, temsirolimus. *J Clinical Oncology* 27(15_suppl):e14636. PMID:27964186, 2009.

312. Kolozsvari B, Szijgyarto Z, Bai P, Gergely P, Verin A, **Garcia JG**, and Bako E. Role of calcineurin in thrombin-mediated endothelial cell contraction. *Cytometry A,* 75A(5): 405-411. PMID: 19235203. 2009.

313. Singleton PA, Chatchavalvanich S, Fu P, Xing J, Birukova AA, Fortune JA, Klibanov AM, **Garcia JG**, and Birukov KG. Akt-mediated transactivation of the S1P1 receptor in caveolin-enriched microdomains regulates endothelial barrier enhancement by oxidized phospholipids. *Circulation Research,* 104(8): 978-986. PMID: 19286607. 2009a.

314. Sun X, Shikata Y, Wang L, Ohmori K, Watanabe N, Wada J, Shikata K, Birukov KG, Makino H, Jacobson JR, Dudek SM, and **Garcia JG**. Enhanced interaction between focal adhesion and adherens junction proteins: involvement in sphingosine 1-phosphate-induced endothelial barrier enhancement. *Microvascular Research,* 77(3): 304-313. PMID: 19323978. 2009.

315. Finigan JH, Boueiz A, Wilkinson E, Damico R, Skirball J, Pae HH, Damarla M, Hasan E, Pearse DB, Reddy SP, Grigoryev DN, Cheadle C, Esmon CT, **Garcia JG**, and Hassoun PM. Activated protein C protects against ventilator-induced pulmonary capillary leak. *American J Physiology: Lung Cell Molecular Physiology,* 296(6): L1002-1011. PMID: 19363121. 2009.

316. Usatyuk PV, Gorshkova IA, He D, Zhao Y, Kalari SK, **Garcia JG**, and Natarajan V. Phospholipase D-mediated activation of IQGAP1 through Rac1 regulates hyperoxia-induced p47phox translocation and reactive oxygen species generation in lung endothelial cells. *J Biological Chemistry,* 284(22): 15339-15352. PMID: 19366706. 2009.

317. Camp SM, Bittman R, Chiang ET, Moreno-Vinasco L, Mirzapoiazova T, Sammani S, Lu X, Sun C, Harbeck M, Roe M, Natarajan V, **Garcia JG**, and Dudek SM. Synthetic analogs of FTY720 [2-amino-2-(2-[4-octylphenyl]ethyl)-1,3-propanediol] differentially regulate pulmonary vascular permeability in vivo and in vitro. *J Pharmacological Experimental Therapeutics,* 331(1): 54-64. PMID: 19592667. 2009.

318. Flores C, Perez-Mendez L, Maca-Meyer N, Muriel A, Espinosa E, Blanco J, Sanguesa R, Muros M, **Garcia JG**, and Villar J. A common haplotype of the LBP gene predisposes to severe sepsis. *Critical Care Medicine,* 37(10): 2759-2766. PMID: 19707138. 2009.

319. Krishnaswamy S, Kanteti R, Duke-Cohan JS, Loganathan S, Liu W, Ma PC, Sattler M, Singleton PA, Ramnath N, Innocenti F, Nicolae DL, Ouyang Z, Liang J, Minna J, Kozloff MF, Ferguson MK,

Natarajan V, Wang YC, **Garcia JG**, Vokes EE, and Salgia R. Ethnic differences and functional analysis of MET mutations in lung cancer. *Clinical Cancer Research,* 15(18): 5714-5723. PMID: 19723643. 2009.

320. Zhao J, Singleton PA, Brown ME, Dudek SM, and **Garcia JG**. Phosphotyrosine protein dynamics in cell membrane rafts of sphingosine-1-phosphate-stimulated human endothelium: role in barrier enhancement. *Cellular Signaling,* 21(12): 1945-1960. PMID: 19755153. 2009b.

321. Chen B, Yates E, Huang Y, Kogut P, Ma L, Turner JR, Tao Y, Camoretti-Mercado B, Lang D, Svensson EC, **Garcia JG**, Gruber PJ, Morrisey EE, and Solway J. Alternative promoter and GATA5 transcripts in mouse. *American J Physiology: Gastrointestinal, Liver Physiology,* 297(6): G1214-1222. PMID: 19779014. 2009.

322. Singleton PA, Pendyala S, Gorshkova IA, Mambetsariev N, Moitra J, **Garcia JG**, and Natarajan V. Dynamin 2 and c-Abl are novel regulators of hyperoxia-mediated NADPH oxidase activation and reactive oxygen species production in caveolin-enriched microdomains of the endothelium. *J Biological Chemistry,* 284(50): 34964-34975. PMID: 19833721. 2009b.

323. Zhao J, Camp SM, Chiang ET, Schilling AB, Dudek SM, and **Garcia JG**. Identification of novel in vitro protein kinase A phosphorylation sites on recombinant non-muscle myosin light chain kinase: nano-liquid chromatography tandem mass spectrometry methodology. *J Organ Dysfunction,* 5(4): 242-253. PMID. 2009c.

324. Wang T, Chiang ET, Moreno-Vinasco L, Lang GD, Pendyala S, Samet JM, Geyh AS, Breysse PN, Chillrud SN, Natarajan V, and **Garcia JG**. Particulate matter disrupts human lung endothelial barrier integrity via ROS- and p38 MAPK-dependent pathways. *American J Respiratory Cell Molecular Biology,* 42(4): 442-449. PMID: 19520919. 2010.

325. Sammani S, Moreno-Vinasco L, Mirzapoiazova T, Singleton PA, Chiang ET, Evenoski CL, Wang T, Mathew B, Husain A, Moitra J, Sun X, Nunez L, Jacobson JR, Dudek SM, Natarajan V, and **Garcia JG**. Differential effects of sphingosine 1-phosphate receptors on airway and vascular barrier function in the murine lung. *American J Respiratory Cell Molecular Biology,* 43(4): 394-402. PMID: 19749179. 2010.

326. Ware LB, Koyama T, Billheimer DD, Wu W, Bernard GR, Thompson BT, Brower RG, Standiford TJ, Martin TR, Matthay MA, and the NHLBI ARDS Clinical Trials Network. (**J. G. Garcia**, Protocol Review Committee Chair). Prognostic and pathogenetic value of combining clinical and biochemical indices in patients with acute lung injury. *Chest,* 137(2): 288-296. PMID: 19858233. 2010.

327. Mambetsariev N, Mirzapoiazova T, Mambetsariev B, Sammani S, Lennon FE, **Garcia JG**, and Singleton PA. Hyaluronic acid binding protein 2 is a novel regulator of vascular integrity. *Arteriosclerosis Thrombosis Vascular Biology,* 30(3): 483-490. PMID: 20042707. 2010.

328. Brown M, Adyshev D, Bindokas V, Moitra J, **Garcia JG**, and Dudek SM. Quantitative distribution and colocalization of non-muscle myosin light chain kinase isoforms and cortactin in human lung endothelium. *Microvascular Research,* 80(1): 75-88. PMID: 20053363. 2010.

329. Jacob A, Hack B, Chiang ET, **Garcia JG**, Quigg RJ, and Alexander JJ. C5a alters blood-brain barrier integrity in experimental lupus. *Faseb J,* 24(6): 1682-1688. PMID: 20065106. 2010.

330. Peng XQ, Damarla M, Skirball J, Nonas S, Wang XY, Han EJ, Hasan EJ, Cao X, Boueiz A, Damico R, Tuder RM, Sciuto AM, Anderson DR, **Garcia JG**, Kass DA, Hassoun PM, and Zhang JT. Protective role of PI3-kinase/Akt/eNOS signaling in mechanical stress through inhibition of p38 mitogen-activated protein kinase in mouse lung. *Acta Pharmacologica Sin,* 31(2): 175-183. PMID: 20139900. 2010.

331. Sweiss NJ, Salloum R, Gandhi S, Alegre ML, Sawaqed R, Badaracco M, Pursell K, Pitrak D, Baughman RP, Moller DR, **Garcia JG**, and Niewold TB. Significant CD4, CD8, and CD19 Lymphopenia in peripheral blood of sarcoidosis patients correlates with severe disease manifestations. *PLoS One,* 5(2):PMID: 20195483. 2010a.

332. Moreno-Vinasco L, and **Garcia JG**. Receptor tyrosine kinase inhibitors in rodent pulmonary hypertension. *Advances Experimental Medicine Biology,* 661: 419-434. PMID: 20204746. 2010.

333. Singleton PA, Mambetsariev N, Lennon FE, Mathew B, Siegler JH, Moreno-Vinasco L, Salgia R, Moss J, and **Garcia JG**. Methylnaltrexone potentiates the anti-angiogenic effects of mTOR inhibitors. *J Angiogenesis Resuscitation,* 2(1): 5. PMID: 20298531. 2010a.

334. Beiser DG, Wang H, Li J, Wang X, Yordanova V, Das A, Mirzapoiazova T, **Garcia JG**, Stern SA, and Vanden Hoek TL. Plasma and myocardial visfatin expression changes are associated with therapeutic hypothermia protection during murine hemorrhagic shock/resuscitation. *Resuscitation,* 81(6): 742-748. PMID: 20347206. 2010.

335. Chen W, **Garcia JG**, and Jacobson JR. Integrin beta4 attenuates SHP-2 and MAPK signaling and reduces human lung endothelial inflammatory responses. *J Cellular Biochemistry,* 110(3): 718-724. PMID: 20512931. 2010.

336. Shah CV, Lanken PN, Localio AR, Gallop R, Bellamy S, Ma SF, Flores C, Kahn JM, Finkel B, Fuchs BD, **Garcia JG**, and Christie JD. An alternative method of acute lung injury classification for use in observational studies. *Chest,* 138(5): 1054-1061. PMID: 20576730. 2010.

337. Sun X, Ma SF, Wade MS, Flores C, Pino-Yanes M, Moitra J, Ober C, Kittles R, Husain AN, Ford JG, and **Garcia JG**. Functional variants of the sphingosine 1-phosphate receptor 1 gene associate with asthma susceptibility. *J Allergy Clinical Immunology,* 126(2): 241-249, 249 e241-243. PMID: 20624651. 2010.

338. Sweiss NJ, Patterson K, Sawaqed R, Jabbar U, Korsten P, Hogarth K, Wollman R, **Garcia JG**, Niewold TB, and Baughman RP. Rheumatologic manifestations of sarcoidosis. *Seminars Respiratory Critical Care Medicine,* 31(4): 463-473. PMID: 20665396. 2010b.

339. Singleton PA, Mirzapoiazova T, Guo Y, Sammani S, Mambetsariev N, Lennon FE, Moreno-Vinasco L, and **Garcia JG**. High-molecular-weight hyaluronan is a novel inhibitor of pulmonary vascular leakiness. *American J Physiology: Lung Cell Molecular Physiology,* 299(5): L639-651. PMID: 20709728. 2010b.

340. Dudek SM, Chiang ET, Camp SM, Guo Y, Zhao J, Brown ME, Singleton PA, Wang L, Desai A, Arce FT, Lal R, Van Eyk JE, Imam SZ, and **Garcia JG**. Abl tyrosine kinase phosphorylates nonmuscle myosin light chain kinase to regulate endothelial barrier function. *Molecular Biology Cell,* 21(22): 4042-4056. PMID: 20861316. 2010.

341. Danilov SM, Balyasnikova IV, Danilova AS, Naperova IA, Arablinskaya NE, Borisov SE, Metzger R, Franke FE, Schwartz DE, Gachok IV, Trakht IN, Kost OA, and **Garcia JG**. Conformational fingerprinting of the angiotensin I-converting enzyme (ACE): application in sarcoidosis. *J Proteome Research,* 9(11): 5782-5793. PMID: 20873814. 2010.

342. Mirzapoiazova T, Moitra J, Moreno-Vinasco L, Sammani S, Turner JR, Chiang ET, Evenoski C, Wang T, Singleton PA, Huang Y, Lussier YA, Watterson DM, Dudek SM, and **Garcia JG**. Non-muscle myosin light chain kinase isoform is a viable molecular target in acute inflammatory lung injury. *American J Respiratory Cell Molecular Biology,* 44(1): 40-52. PMID: 20139351. 2011.

343. Mathew B, Huang Y, Jacobson JR, Berdyshev E, Gerhold LM, Wang T, Moreno-Vinasco L, Lang G, Zhao Y, Chen CT, Lariviere PJ, Mauceri H, Sammani S, Husain AN, Dudek SM, Natarajan V, Lussier YA, Weichselbaum RR, and **Garcia JG**. Simvastatin attenuates radiation-induced murine lung injury and dysregulated lung gene expression. *American J Respiratory Cell Molecular Biology,* 44(3): 415-422. PMID: 20508068. 2011a.

344. Wang L, Chiang ET, Simmons JT, **Garcia JG**, and Dudek SM. FTY720-induced human pulmonary endothelial barrier enhancement is mediated by c-Abl. *European Respiratory J,* 38(1): 78-88. PMID: 21071472. 2011.

345. Wolfson RK, Chiang ET, and **Garcia JG**. HMGB1 induces human lung endothelial cell cytoskeletal rearrangement and barrier disruption. *Microvascular Research,* 81(2): 189-197. PMID: 21146549. 2011.

346. Zhao Y, Gorshkova IA, Berdyshev E, He D, Fu P, Ma W, Su Y, Usatyuk PV, Pendyala S, Oskouian B, Saba JD, **Garcia JG**, and Natarajan V. Protection of LPS-induced murine acute lung injury by sphingosine 1-phosphate lyase suppression. *American J Respiratory Cell Molecular Biology,* 45(2): 426-435. PMID: 21148740. 2011.

347. Mathew B, Lennon FE, Siegler J, Mirzapoiazova T, Mambetsariev N, Sammani S, Gerhold LM, Lariviere PJ, Chen CT, **Garcia JG**, Salgia R, Moss J, and Singleton PA. The novel role of the mu opioid receptor in lung cancer progression: a laboratory investigation. *Anesthesia Analgesia,* 112(3): 558-567. PMID: 21156980. 2011b.

348. Calfee CS, Ware LB, Glidden DV, Eisner MD, Parsons PE, Thompson BT, Matthay MA, and ARDS Network. (**J. G. Garcia**, Protocol Review Committee Chair). Use of risk reclassification with multiple biomarkers improves mortality prediction in acute lung injury. *Critical Care Medicine,* 39(4): 711-717. PMID: 21283009. 2011.

349. Pino-Yanes M, Ma SF, Sun X, Tejera P, Corrales A, Blanco J, Perez-Mendez L, Espinosa E, Muriel A, Blanch L, **Garcia JG**, Villar J, and Flores C. Interleukin 1 receptor-associated kinase 3 gene associates with susceptibility to acute lung injury. *American J Respiratory Cell Molecular Biology,* 45(4): 740-745. PMID: 21297081. 2011.

350. Berdyshev EV, Gorshkova I, Usatyuk P, Kalari S, Zhao Y, Pyne NJ, Pyne S, Sabbadini RA, **Garcia JG**, and Natarajan V. Intracellular S1P generation is essential for S1P-induced motility of human lung endothelial cells: role of sphingosine kinase 1 and S1P lyase. *PLoS One,* 6(1): e16571. PMID: 21304987. 2011.

351. Zhou T, **Garcia JG**, and Zhang W. Integrating microRNAs into a system biology approach to acute lung injury. *Translational Research,* 157(4): 180-190. PMID: 21420028. 2011.

352. Han YJ, Ma SF, Yourek G, Park YD, and **Garcia JG**. A transcribed pseudogene of *MYLK* promotes cell proliferation. *Faseb J,* 25(7): 2305-2312. PMID: 21441351. 2011.

353. Pendyala S, Moitra J, Kalari S, Kleeberger SR, Zhao Y, Reddy SP, **Garcia JG**, and Natarajan V. Nrf2 regulates hyperoxia-induced Nox4 expression in human lung endothelium: Identification of functional antioxidant response elements on the Nox4 promoter. *Free Radical Biology Medicine,* 50(12): 1749-1759. PMID: 21443946. 2011.

354. Usatyuk PV, He D, Bindokas V, Gorshkova IA, Berdyshev EV, **Garcia JG**, and Natarajan V. Photolysis of caged sphingosine 1-phosphate induces barrier enhancement and intracellular activation

of lung endothelial cell signaling pathways. *American J Physiology: Lung Cell Molecular Physiology,* 300(6): L840-850. PMID: 21478254. 2011.

355. Zhang Y, Noth I, **Garcia JG**, and Kaminski N. A variant in the promoter of MUC5B and idiopathic pulmonary fibrosis. *New England J Medicine,* 364(16): 1576-1577. PMID: 21506748. 2011.

356. **Garcia JG**. Genomic investigations into acute inflammatory lung injury. *Proceedings American Thoracic Society,* 8(2): 167-172. PMID: 21543796. 2011a.

357. **Garcia JG**. Focusing on the flood: Targeting functional polymorphisms in ALI permeability Pathways. *American J Respiratory Critical Care Medicine,* 183(10): 1287-1289. PMID: 21596828. 2011b.

358. Sammani S, Park KS, Zaidi SR, Mathew B, Wang T, Huang Y, Zhou T, Lussier YA, Husain AN, Moreno-Vinasco L, Vigneswaran WT, and **Garcia JG**. A sphingosine 1-phosphate 1 receptor agonist modulates brain death-induced neurogenic pulmonary injury. *American J Respiratory Cell Molecular Biology,* 45(5): 1022-1027. PMID: 21617203. 2011.

359. Ma SF, Xie L, Pino-Yanes M, Sammani S, Wade MS, Letsiou E, Siegler J, Wang T, Infusino G, Kittles RA, Flores C, Zhou T, Prabhakar BS, Moreno-Vinasco L, Villar J, Jacobson JR, Dudek SM, and **Garcia JG**. Type 2 deiodinase and host responses of sepsis and acute lung injury. *American J Respiratory Cell Molecular Biology,* 45(6): 1203-1211. PMID: 21685153. 2011.

360. Mathew B, Jacobson JR, Berdyshev E, Huang Y, Sun X, Zhao Y, Gerhold LM, Siegler J, Evenoski C, Wang T, Zhou T, Zaidi R, Moreno-Vinasco L, Bittman R, Chen CT, Lariviere PJ, Sammani S, Lussier YA, Dudek SM, Natarajan V, Weichselbaum RR, and **Garcia JG**. Role of sphingolipids in murine radiation-induced lung injury: protection by sphingosine 1-phosphate analogs. *Faseb J,* 25(10): 3388-3400. PMID: 21712494. 2011c.

361. Liu KD, Thompson BT, Ancukiewicz M, Steingrub JS, Douglas IS, Matthay MA, Wright P, Peterson MW, Rock P, Hyzy RC, Anzueto A, Truwit JD, and the NHLBI ARDS Clinical Trials Network. (**J. G. Garcia**, Protocol Review Committee Chair). Acute kidney injury in patients with acute lung injury: impact of fluid accumulation on classification of acute kidney injury and associated outcomes. *Critical Care Medicine,* 39(12): 2665-2671. PMID: 21785346. 2011.

362. Mitra S, Sammani S, Wang T, Boone DL, Meyer NJ, Dudek SM, Moreno-Vinasco L, **Garcia JG**, and Jacobson JR. Role of growth arrest and DNA damage-inducible alpha in Akt phosphorylation and ubiquitination after mechanical stress-induced vascular injury. *American J Respiratory Critical Care Medicine,* 184(9): 1030-1040. PMID: 21816939. 2011.

363. Adyshev DM, Moldobaeva NK, Elangovan VR, **Garcia JG**, and Dudek SM. Differential involvement of ezrin/radixin/moesin proteins in sphingosine 1-phosphate-induced human pulmonary endothelial cell barrier enhancement. *Cellular Signaling,* 23(12): 2086-2096. PMID: 21864676. 2011.

364. Barca-Mayo O, Liao XH, Dicosmo C, Dumitrescu A, Moreno-Vinasco L, Wade MS, Sammani S, Mirzapoiazova T, **Garcia JG**, Refetoff S, and Weiss RE. Role of type 2 deiodinase in response to acute lung injury (ALI) in mice. *Proceedings National Academy Science U S A,* 108(49): E1321-1329. PMID: 22065740. 2011.

365. Yao W, Mu W, Zeifman A, Lofti M, Remillard CV, Makino A, Perkins DL, **Garcia JG**, Yuan JX, and Zhang W. Fenfluramine-induced gene dysregulation in human pulmonary artery smooth muscle and endothelial cells. *Pulmonary Circulation,* 1(3): 405-418. PMID: 22140631. 2011.

366. Sweiss NJ, Zhang W, Franek BS, Kariuki SN, Moller DR, Patterson KC, Bennett P, Girijala LR, Nair V, Baughman RP, **Garcia JG**, and Niewold TB. Linkage of Type I interferon activity and TNF-alpha levels in serum with sarcoidosis manifestations and ancestry. *PLoS One,* 6(12): e29126. PMID: 22195005. 2011.

367. Han YJ, Ma SF, Wade MS, Flores C, and **Garcia JG**. An intronic *MYLK* variant associated with inflammatory lung disease regulates promoter activity of the smooth muscle myosin light chain kinase isoform. *J Molecular Medicine (Berl),* 90(3): 299-308. PMID: 22015949. 2012.

368. Wang T, Lang GD, Moreno-Vinasco L, Huang Y, Goonewardena SN, Peng YJ, Svensson EC, Natarajan V, Lang RM, Linares JD, Breysse PN, Geyh AS, Samet JM, Lussier YA, Dudley S, Prabhakar NR, and **Garcia JG**. Particulate matter induces cardiac arrhythmias via dysregulation of carotid body sensitivity and cardiac sodium channels. *American J Respiratory Cell Molecular Biology,* 46(4): 524-531. PMID: 22108299. 2012a.

369. Dessap MA, Voiriot G, Zhou T, Marcos E, Dudek SM, Jacobson JR, Machado R, Adnot S, Brochard L, Maitre B, and **Garcia JG**. Conflicting physiological and genomic cardiopulmonary effects of recruitment maneuvers in murine acute lung injury. *American J Respiratory Cell Molecular Biology,* 46(4): 541-550. PMID: 22135358. 2012.

370. Usatyuk PV, Singleton PA, Pendyala S, Kalari SK, He D, Gorshkova IA, Camp SM, Moitra J, Dudek SM, **Garcia JG**, and Natarajan V. Novel role for non-muscle myosin light chain kinase (MLCK) in hyperoxia-induced recruitment of cytoskeletal proteins, NADPH oxidase activation, and reactive oxygen species generation in lung endothelium. *J Biological Chemistry,* 287(12): 9360-9375. PMID: 22219181. 2012.

371. Flores C, Ma SF, Pino-Yanes M, Wade MS, Perez-Mendez L, Kittles RA, Wang D, Papaiahgari S, Ford JG, Kumar R, and **Garcia JG**. African ancestry is associated with asthma risk in african americans. *PLoS One,* 7(1): e26807. PMID: 22235241. 2012.

372. Man M, Close SL, Shaw AD, Bernard GR, Douglas IS, Kaner RJ, Payen D, Vincent JL, Fosscecco S, Janes JM, Leishman AG, O'Brien L, Williams MD, and **Garcia JG**. Beyond single-marker analyses: mining whole genome scans for insights into treatment responses in severe sepsis. *Pharmacogenomics J*, PMID: 22310353. 2012.

373. **Garcia JGN**, and Kazee N. Urban health: combating disparities with local data. Edited by Steven Whitman, Ami M. Shah, and Maureen R. Benjamins. *American Journal of Epidemiology*, PMID. 2012.

374. Patel AR, Ahmad H, Desai AA, Thiruvoipati T, Turner KM, Weinert L, Yodwut C, Czobor P, Artz N, Trevino S, Mor-Avi V, Machado R, **Garcia JG**, and Lang R. Mechanistic insights and characterization of cardiomyopathy due to sickle cell disease. *J Cardiovascular Magnetic Resonance,* Suppl 1: O78. PMID: 22376307. 2012.

375. Ahmad H, Gayat E, Yodwut C, Abduch MC, Patel AR, Weinert L, Desai A, Tsang W, **Garcia JG**, Lang RM, and Mor-Avi V. Evaluation of myocardial deformation in patients with sickle cell disease and preserved ejection fraction using three-dimensional speckle tracking echocardiography. *Echocardiography,* 29(8): 962-969. PMID: 22563937. 2012.

376. Wang T, Wang L, Zaidi SR, Sammani S, Siegler J, Moreno-Vinasco L, Mathew B, Natarajan V, and **Garcia JG**. Hydrogen sulfide attenuates particulate matter-induced human lung endothelial barrier disruption via combined reactive oxygen species scavenging and Akt activation. *American J Respiratory Cellular Molecular Biology,* 47(4): 491-496. PMID: 22592920. 2012b.

377. Calfee CS, Gallagher D, Abbott J, Thompson BT, Matthay MA, and ARDS Network. (**J. G. Garcia**, Protocol Review Committee Chair). Plasma angiopoietin-2 in clinical acute lung injury: prognostic and pathogenetic significance. *Critical Care Medicine,* 40(6): 1731-1737. PMID: 22610178. 2012.

378. Gorshkova I, Zhou T, Mathew B, Jacobson JR, Takekoshi D, Bhattacharya P, Smith B, Aydogan B, Weichselbaum RR, Natarajan V, **Garcia JG**, and Berdyshev EV. Inhibition of serine palmitoyltransferase delays the onset of radiation-induced pulmonary fibrosis through the negative regulation of sphingosine kinase-1 expression. *J Lipid Research,* 53(8): 1553-1568. PMID: 22615416. 2012.

379. Ashley EA, Hershberger RE, Caleshu C, Ellinor PT, **Garcia JG**, Herrington DM, Ho CY, Johnson JA, Kittner SJ, Macrae CA, Mudd-Martin G, Rader DJ, Roden DM, Scholes D, Sellke FW, Towbin JA, Van Eyk J, and Worrall BB. Genetics and cardiovascular disease: a policy statement from the American Heart Association. *Circulation,* 126(1): 142-157. PMID: 22645291. 2012.

380. Desai AA, Zhou T, Ahmad H, Zhang W, Mu W, Trevino S, Wade MS, Raghavachari N, Kato GJ, Peters-Lawrence MH, Thiruvoipati T, Turner K, Artz N, Huang Y, Patel AR, Yuan JX, Gordeuk VR, Lang RM, **Garcia JG**, and Machado RF. A novel molecular signature for elevated tricuspid regurgitation velocity in sickle cell disease. *American J Respiratory Critical Care Medicine,* 186(4): 359-368. PMID: 22679008. 2012.

381. Chen W, Sammani S, Mitra S, Ma SF, **Garcia JG**, and Jacobson JR. Critical role for integrin-beta4 in the attenuation of murine acute lung injury by simvastatin. *American J Physiology: Lung Cell Molecular Physiology,* 303(4): L279-285. PMID: 22683568. 2012.

382. Frank KM, Zhou T, Moreno-Vinasco L, Hollett B, **Garcia JG**, and Bubeck Wardenburg J. Host response signature to staphylococcus aureus alpha-hemolysin implicates pulmonary Th17 response. *Infection Immunity,* 80(9): 3161-3169. PMID: 22733574. 2012.

383. Sun X, Singleton PA, Letsiou E, Zhao J, Belvitch P, Sammani S, Chiang ET, Moreno-Vinasco L, Wade MS, Zhou T, Liu B, Parastatidis I, Thomson L, Ischiropoulos H, Natarajan V, Jacobson JR, Machado RF, Dudek SM, and **Garcia JG**. Sphingosine 1-phosphate receptor-3 is a novel biomarker in acute lung injury. *American J Respiratory Cell Molecular Biology,* 47(5): 628-636. PMID: 22771388. 2012.

384. Valentine SL, Sapru A, Higgerson RA, Spinella PC, Flori HR, Graham DA, Brett M, Convery M, Christie LM, Karamessinis L, Randolph AG, Network PAaSIsP, and the NHLBI ARDS Clinical Trials Network. (**J. G. Garcia**, Protocol Review Committee Chair). Fluid balance in critically ill children with acute lung injury. *Critical Care Medicine,* 40(10): 2883-2889. PMID: 22824936. 2012.

385. Wang T, Wang L, Moreno-Vinasco L, Lang GD, Siegler JH, Mathew B, Usatyuk PV, Samet JM, Geyh AS, Breysse PN, Natarajan V, and **Garcia JG**. Particulate matter air pollution disrupts endothelial cell barrier via calpain-mediated tight junction protein degradation. *Particle Fibre Toxicology,* 9(1): 35. PMID: 22931549. 2012c.

386. Zhou T, Zhang W, Sweiss NJ, Chen ES, Moller DR, Knox KS, Ma SF, Wade MS, Noth I, Machado RF, and **Garcia JG**. Peripheral blood gene expression as a novel genomic biomarker in complicated sarcoidosis. *PLoS One,* 7(9): e44818. PMID: 22984568. 2012.

387. Pitroda SP, Zhou T, Sweis RF, Filippo M, Labay E, Beckett MA, Mauceri HJ, Liang H, Darga TE, Perakis S, Khan SA, Sutton HG, Zhang W, Khodarev NN, **Garcia JG**, and Weichselbaum RR. Tumor endothelial inflammation predicts clinical outcome in diverse human cancers. *PLoS One,* 7(10): e46104. PMID: 23056240. 2012.

388. Petrov MN, Shilo VY, Tarasov AV, Schwartz DE, **Garcia JG**, Kost OA, and Danilov SM. Conformational changes of blood ACE in chronic uremia. *PLoS One,* 7(11): e49290. PMID: 23166630. 2012.

389. Wang T, **Garcia JG**, and Zhang W. Epigenetic regulation in particulate matter-mediated cardiopulmonary toxicities: a systems biology perspective. *Current Pharmacogenomics Personalized Medicine,* 10(4): 314-321. PMID: 23185213. 2012d.

390. Taimur A, **JGN Garcia.** Sphingolipids in Lung Endothelial Biology and Regulation of Vascular Integrity. *Handbook of Experimental Pharmacology.* Pg 1-26. PMID. 23563658. 2013.

391. Pillai VB, Sundaresan NR, Kim G, Samant S, Moreno-Vinasco L, **Garcia JG**, and Gupta MP. Nampt secreted from cardiomyocytes promotes development of cardiac hypertrophy and adverse ventricular remodeling. *American J Physiology: Heart Circulatory Physiology,* 304(3): H415-426. PMID: 23203961. 2013.

392. Ephstein Y, Singleton PA, Chen W, Wang L, Salgia R, Kanteti P, Dudek SM, **Garcia JG**, and Jacobson JR. Critical role of S1PR1 and integrin beta4 in HGF/c-Met-mediated increases in vascular integrity. *J Biological Chemistry,* 288(4): 2191-2200. PMID: 23212923. 2013.

393. Sysol JR, Kempf C, Helton MN, Dong Y, Zhu D, Sun H, **Garcia JG**, Machado RF, and Chen J. Evaluation of a reliable and cost-effective method of DNA isolation for mouse genotyping. *Biotechnology Letters,* 35(4): 509-514. PMID: 23242499. 2013.

394. Huang LS, Berdyshev E, Mathew B, Fu P, Gorshkova IA, He D, Ma W, Noth I, Ma SF, Pendyala S, Reddy SP, Zhou T, Zhang W, Garzon SA, **Garcia JG**, and Natarajan V. Targeting sphingosine kinase 1 attenuates bleomycin-induced pulmonary fibrosis. *Faseb J,* 27(4): 1749-1760. PMID: 23315259. 2013a.

395. Liu B, Sun X, Suyeoka G, **Garcia JG**, and Leiderman YI. TGFbeta Signaling induces expression of Gadd45b in retinal ganglion cells. *Investigative Ophthalmology Vision Science,* 54(2): 1061-1069. PMID: 23329662. 2013.

396. Natarajan V, Dudek SM, Jacobson JR, Moreno-Vinasco L, Huang LS, Abassi T, Mathew B, Zhao Y, Wang L, Bittman R, Weichselbaum R, Berdyshev E, and **Garcia JG**. Sphingosine 1-phosphate, FTY720, and sphingosine 1-phosphate receptors in the pathobiology of acute lung injury. *American J Respiratory Cell Molecular Biology,* 49(1): 6-17. PMID: 23449739. 2013.

397. Adyshev DM, Moldobaeva N, Mapes B, Elangovan V, and **Garcia JG**. MicroRNA regulation of nonmuscle myosin light chain kinase expression in human lung endothelium. *American J Respiratory Cell Molecular Biology,* 49(1): 58-66. PMID: 23492194. 2013a.

398. Arce FT, Meckes B, Camp SM, **Garcia JG**, Dudek SM, and Lal R. Heterogeneous elastic response of human lung microvascular endothelial cells to barrier modulating stimuli. *Nanomedicine,* 9(7): 875-884. PMID: 23523769. 2013.

399. Mathew B, Jacobson JR, Siegler JH, Moitra J, Blasco M, Xie L, Unzueta C, Zhou T, Evenoski C, Al-Sakka M, Sharma R, Huey B, Bulent A, Smith B, Jayaraman S, Reddy NM, Reddy SP, Fingerle-Rowson G, Bucala R, Dudek SM, Natarajan V, Weichselbaum RR, and **Garcia JG**. Role of migratory inhibition factor in age-related susceptibility to radiation lung injury via NF-E2-related factor-2 and antioxidant regulation. *American J Respiratory Cell Molecular Biology,* 49(2): 269-278. PMID: 23526214. 2013.

400. Usatyuk PV, Burns M, Mohan V, Pendyala S, He D, Ebenezer DL, Harijith A, Fu P, Huang LS, Bear JE, **Garcia JG**, and Natarajan V. Coronin 1B regulates S1P-induced human lung endothelial cell

chemotaxis: role of PLD2, protein kinase C and Rac1 signal transduction. *PLoS One,* 8(5): e63007. PMID: 23667561. 2013.

401. Peljto AL, Zhang Y, Fingerlin TE, Ma SF, **Garcia JG**, Richards TJ, Silveira LJ, Lindell KO, Steele MP, Loyd JE, Gibson KF, Seibold MA, Brown KK, Talbert JL, Markin C, Kossen K, Seiwert SD, Murphy E, Noth I, Schwarz MI, Kaminski N, and Schwartz DA. Association between the *MUC5B* promoter polymorphism and survival in patients with idiopathic pulmonary fibrosis. *JAMA,* 309(21): 2232-2239. PMID: 23695349. 2013.

402. Adyshev DM, Dudek SM, Moldobaeva N, Kim KM, Ma SF, Kasa A, **Garcia JG**, and Verin AD. Ezrin/radixin/moesin proteins differentially regulate endothelial hyperpermeability after thrombin. *American J Physiology: Lung Cell Molecular Physiology,* 305(3): L240-255. PMID: 23729486, 2013b.

403. Huang LS, Fu P, Patel P, Harijith A, Sun T, Zhao Y, **Garcia JG**, Chun J, and Natarajan V. Lysophosphatidic acid receptor-2 deficiency confers protection against bleomycin-induced lung injury and fibrosis in mice. *American J Respiratory Cell Molecular Biology,* 49(6): 912-922. PMID: 23808384, 2013b.

404. Nutescu EA, Drozda K, Bress AP, Galanter WL, Stevenson J, Stamos TD, Desai AA, Duarte JD, Gordeuk V, Peace D, Kadkol SS, Dodge C, Saraf S, Garofalo J, Krishnan JA, **Garcia JG**, and Cavallari LH. Feasibility of implementing a comprehensive warfarin pharmacogenetics service. *Pharmacotherapy,* 33(11): 1156-1164. PMID: 23864527, 2013.

405. Sun X, Ma SF, Wade MS, Acosta-Herrera M, Villar J, Pino-Yanes M, Zhou T, Liu B, Belvitch P, Moitra J, Han YJ, Machado R, Noth I, Natarajan V, Dudek SM, Jacobson JR, Flores C, and **Garcia JG**. Functional promoter variants in sphingosine 1-phosphate receptor 3 associate with susceptibility to sepsis-associated acute respiratory distress syndrome. *American J Physiology: Lung Cell Molecular Physiology,* 305(7): L467-477. PMID: 23911438, 2013.

406. Bress A, Han J, Patel SR, Desai AA, Mansour I, Groo V, Progar K, Shah E, Stamos TD, Wing C, **Garcia JG**, Kittles R, and Cavallari LH. Association of aldosterone synthase polymorphism (CYP11B2 -344T>C) and genetic ancestry with atrial fibrillation and serum aldosterone in African Americans with heart failure. *PLoS One.* 8(7): e71268. PMID: 23936266, 2013.

407. Chen J, Feng G, Guo Q, Wardenburg JB, Lin S, Inoshima I, Deaton R, Yuan JX, **Garcia JG**, Machado RF, Otto M, and Wunderink RG. Transcriptional events during the recovery from MRSA lung infection: a mouse pneumonia model. *PLoS One.* 8(8): e70176. PMID: 23936388, 2013.

408. **Garcia JG**, and Sznajder JI. Healthcare disparities in patients with acute respiratory distress syndrome. Toward equity. *American J Respiratory Critical Care Medicine.* 188(6): 631-632. PMID: 24032377, 2013.

409. Herazo-Maya JD, Noth I, Duncan SR, Kim S, Ma SF, Tseng GC, Feingold E, Juan-Guardela BM, Richards TJ, Lussier Y, Huang Y, Vij R, Lindell KO, Xue J, Gibson KF, Shapiro SD, **Garcia JG**, and Kaminski N. Peripheral blood mononuclear cell gene expression profiles predict poor outcome in idiopathic pulmonary fibrosis. *Science Translational Medicine.* 5(205): 205ra136. PMID: 24089408, 2013.

410. Noth I, Zhang Y, Ma SF, Flores C, Barber M, Huang Y, Broderick SM, Wade MS, Hysi P, Scuirba J, Richards TJ, Juan-Guardela BM, Vij R, Han MK, Martinez FJ, Kossen K, Seiwert SD, Christie JD, Nicolae D, Kaminski N, and **Garcia JG**. Genetic variants associated with idiopathic pulmonary fibrosis susceptibility and mortality: a genome-wide association study. *Lancet Respiratory Medicine.* 1(4): 309-317. PMID: 24429156, 2013.

411. Zhang W, Zhou T, Ma SF, Machado RF, Bhorade SM, and **Garcia JG**. MicroRNAs implicated in dysregulation of gene expression following human lung transplantation. *Translational Respiratory Medicine.* 1(1). PMID: 24416715, 2013.

412. Zhang X, Zhang W, Ma SF, Miasniakova G, Sergueeva A, Ammosova T, Xu M, Nekhai S, Nourai M, Wade MS, Prchal JT, **Garcia JG**, Machado RF, and Gordeuk VR. Iron deficiency modifies gene expression variation induced by augmented hypoxia sensing. *Blood Cells Molecular Disease.* 52(1): 35-45. PMID: 23993337, 2014a.

413. Chen W, Sharma R, Rizzo AN, Siegler JH, **Garcia JG**, and Jacobson JR. Role of claudin-5 in the attenuation of murine acute lung injury by simvastatin. *American J Respiratory Cell Molecular Biology.* 50(2): 328-336. PMID: 24028293, 2014a.

414. Adyshev DM, Elangovan VR, Moldobaeva N, Mapes B, Sun X, and **Garcia JG**. Mechanical stress induces pre-B-cell colony-enhancing factor/NAMPT expression via epigenetic regulation by miR-374a and miR-568 in human lung endothelium. *American J Respiratory Cell Molecular Biology.* 50(2): 409-418. PMID: 24053186, 2014.

415. Wang L, Sammani S, Moreno-Vinasco L, Letsiou E, Wang T, Camp SM, Bittman R, **Garcia JG**, and Dudek SM. FTY720 (s)-phosphonate preserves sphingosine 1-phosphate receptor 1 expression and exhibits superior barrier protection to FTY720 in acute lung injury. *Critical Care Medicine.* 42(3): e189-199. PMID: 24335440, 2014a.

416. Wolfson RK, Mapes B, and **Garcia JG**. Excessive mechanical stress increases *HMGB1* expression in human lung microvascular endothelial cells via STAT3. *Microvascular Research.* 92: 50-55. PMID: 24370952, 2014.

417. Wang T, Moreno-Vinasco L, Ma SF, Zhou T, Shimizu Y, Sammani S, Epshtein Y, Watterson DM, Dudek SM, and **Garcia JG**. Nonmuscle myosin light chain kinase regulates murine asthmatic inflammation. *American J Respiratory Cell Molecular Biology.* 50(6): 1129-1135. PMID: 24428690, 2014b.

418. Sweiss NJ, Lower EE, Mirsaeidi M, Dudek S, **Garcia JG**, Perkins D, Finn PW, and Baughman RP. Rituximab in the treatment of refractory pulmonary sarcoidosis. *European Respiratory J.* 43(5): 1525-1528. PMID: 24488568, 2014a.

419. Mirsaeidi M, Machado RF, **Garcia JG**, and Schraufnagel DE. Nontuberculous mycobacterial disease mortality in the United States, 1999-2010: a population-based comparative study. *PLoS One.* 9(3): e91879. PMID: 24632814, 2014.

420. Danilov SM, Wade MS, Schwager SL, Douglas RG, Nesterovitch AB, Popova IA, Hogarth KD, Bhardwaj N, Schwartz DE, Sturrock ED, and **Garcia JG**. A novel angiotensin I-converting enzyme mutation (S333W) impairs N-domain enzymatic cleavage of the anti-fibrotic peptide, AcSDKP. *PLoS One.* 9(2): e88001. PMID: 24505347, 2014.

421. Zhang X, Zhang W, Ma SF, Desai AA, Saraf S, Miasniakova G, Sergueeva A, Ammosova T, Xu M, Nekhai S, Abbasi T, Casanova NG, Steinberg MH, Baldwin CT, Sebastiani P, Prchal JT, Kittles R, **Garcia JG**, Machado RF, and Gordeuk VR. Hypoxic response contributes to altered gene expression and precapillary pulmonary hypertension in patients with sickle cell disease. *Circulation.* 129(16): 1650-1658. PMID: 24515990, 2014b.

422. Moreno-Vinasco L, Quijada H, Sammani S, Siegler J, Letsiou E, Deaton R, Saadat L, Zaidi RS, Messana J, Gann PH, Machado RF, Ma W, Camp SM, Wang T, and **Garcia JG**. Nicotinamide

phosphoribosyltransferase inhibitor is a novel therapeutic candidate in murine models of inflammatory lung injury. *American J Respiratory Cell Molecular Biology.* 51(2): 223-228. PMID: 24588101, 2014.

423. Usatyuk PV, Fu P, Mohan V, Epshtein Y, Jacobson JR, Gomez-Cambronero J, Wary KK, Bindokas V, Dudek SM, Salgia R, **Garcia JG**, and Natarajan V. Role of c-Met/phosphatidylinositol 3-kinase (PI3k)/Akt signaling in hepatocyte growth factor (HGF)-mediated lamellipodia formation, reactive oxygen species (ROS) generation, and motility of lung endothelial cells. *J Biological Chemistry.* 289(19): 13476-13491. PMID: 24634221, 2014.

424. Desai AA, Patel AR, Ahmad H, Groth JV, Thiruvoipati T, Turner K, Yodwut C, Czobor P, Artz N, Machado RF, **Garcia JG**, and Lang RM. Mechanistic insights and characterization of sickle cell disease-associated cardiomyopathy. *Circulatory Cardiovascular Imaging.* 7(3): 430-437. PMID: 24676783, 2014.

425. Zhou T, Wang T, and **Garcia JG**. Genes influenced by the non-muscle isoform of myosin light chain kinase impact human cancer prognosis. *PLoS One.* 9(4): e94325. PMID: 24714365, 2014a.

426. Sweiss NJ, Noth I, Mirsaeidi M, Zhang W, Naureckas ET, Hogarth DK, Strek M, Caligiuri P, Machado RF, Niewold TB, **Garcia JG**, Pangan AL, and Baughman RP. Efficacy results of a 52-week trial of adalimumab in the treatment of refractory sarcoidosis. *Sarcoidosis Vasculitis Diffuse Lung Disease.* 31(1): 46-54. PMID: 24751453, 2014b.

427. Huang LS, Mathew B, Li H, Zhao Y, Ma SF, Noth I, Reddy SP, Harijith A, Usatyuk PV, Berdyshev EV, Kaminski N, Zhou T, Zhang W, Zhang Y, Rehman J, Kotha SR, Gurney TO, Parinandi NL, Lussier YA, **Garcia JG**, and Natarajan V. The mitochondrial cardiolipin remodeling enzyme lysocardiolipin acyltransferase is a novel target in pulmonary fibrosis. *American J Respiratory Cell Molecular Biology.* 189(11): 1402-1415. PMID: 24779708, 2014.

428. Eadon MT, Jacob A, Cunningham PN, Quigg RJ, **Garcia JG**, and Alexander JJ. Transcriptional profiling reveals that C5a alters microRNA in brain endothelial cells. *Immunology.* 143(3): 363-373. PMID: 24801999, 2014.

429. Sun X, Ramamoorthi Elangovan V, Mapes B, Camp SM, Sammani S, Saadat L, Ceco E, Ma SF, Flores C, Macdougall MS, Quijada H, Liu B, Kempf CL, Wang T, Chiang ET, and **Garcia JG**. The *NAMPT* promoter is regulated by mechanical stress, STAT5, and ARDS-associated genetic variants. *American J Respiratory Cell Molecular Biology.* Epub May 2014 PMID: 24821571, 2014.

430. Ni X, Epshtein Y, Chen W, Zhou T, Xie L, **Garcia JG**, and Jacobson JR. Interaction of integrin beta4 with S1P receptors in S1P- and HGF-induced endothelial barrier enhancement. *J Cellular Biochemistry.* 115(6): 1187-1195. [Epub November 2014] PMID: 24851274, 2014.

431. Calfee CS, Delucchi K, Parsons PE, Thompson BT, Ware LB, Matthay MA, and ARDS Network. (**J. G. Garcia**, Protocol Review Committee Chair). Subphenotypes in acute respiratory distress syndrome: latent class analysis of data from two randomised controlled trials. *Lancet Respiratory Medicine.* 2(8): 611-620. PMID: 24853585, 2014.

432. Mitra S, Wade MS, Sun X, Moldobaeva N, Flores C, Ma SF, Zhang W, **Garcia JG**, and Jacobson JR. GADD45a promoter regulation by a functional genetic variant associated with acute lung injury. *PLoS One.* 9(6): e100169. PMID: 24940746, 2014.

433. Goldman JL, Sammani S, Kempf C, Saadat L, Letsiou E, Wang T, Moreno-Vinasco L, Rizzo AN, Fortman JD, and **Garcia JG**. Pleiotropic effects of interleukin-6 in a "two-hit" murine model of acute respiratory distress syndrome. *Pulmonary Circulation.* 4(2): 280-288. PMID: 25006447, 2014.

434. Belvitch P, Adyshev D, Elangovan VR, Brown ME, Naureckas C, Rizzo AN, Siegler JH, **Garcia JG**, and Dudek SM. Proline-rich region of non-muscle myosin light chain kinase modulates kinase activity and endothelial cytoskeletal dynamics. *Microvascular Research.* 95: 94-102. PMID: 25072537, 2014.

435. Gardeaux V, Achour I, Li J, Maienschein-Cline M, Li H, Pesce L, Parinandi G, Bahroos N, Winn R, Foster I, **Garcia JG**, and Lussier YA. 'N-of-1-pathways' unveils personal deregulated mechanisms from a single pair of RNA-Seq samples: towards precision medicine. *J American Medical Informatics Association.* 21(6): 1015-1025. PMID: 25301808, 2014.

436. Khalpey Z, Qu N, Hemphill C, Louis AV, Ferng AS, Son TG, Stavoe K, Penick K, Tran PL, Konhilas J, Lagrand DS, and **Garcia JG**. Rapid porcine lung decellularization utilizing a novel organ regenerative control acquisition bioreactor. *ASAIO J.* 61:71-77, PMID: 25303798, 2014.

437. Zhou T, Wang T, and **Garcia JG**. Expression of nicotinamide phosphoribosyltransferase-influenced genes predicts recurrence-free survival in lung and breast cancers. *Nature: Scientific Reports,* 4: 6107. PMID: 25146220, 2014b.

438. Chen J, Tang H, Sysol JR, Moreno-Vinasco L, Shioura KM, Chen T, Gorshkova I, Wang L, Huang L, Usatyuk PV, Sammani S, Zhou G, Raj JU, **Garcia JG**, Berdyshev E, Yuan JX, Natarajan V, and Machado RF. The sphingosine kinase 1/sphingosine 1-phosphate pathway in pulmonary arterial hypertension. *American J Respiratory Critical Care Medicine.* 190(9):1032-43, PMID: 25180446, 2014b.

439. Han MK, Zhou Y, Murray S, Tayob N, Noth I, Lama VN, Moore BB, White ES, Flaherty KR, Huffnagle GB, Dushay K, Kurtis J, Chapman JT, Anstrom K, Brown KK, Cosgrove G, Solomon J, Swigris J, Fernandez-Perez E, Criner G, Cordova F, Patel N, Rogers T, Belperio J, King TE Jr, Collard HR, Noth I, Brown C, **Garcia JG,** Hogarth DK, Huang Y, Lussier Y, Ma SF, Wade M, Flaherty KR, Toews GB, Hogaboam C, Moore T, Spino C, Loyd JE Martinez FJ[2]. Lung microbiome and disease progression in idiopathic pulmonary fibrosis: an analysis of the COMET study. *Lancet Respir Medicine* [Epub April 2014] 2(7):548-56, 2014.

440. Wang T, Zhou T, Saadat L, and **Garcia JG**. A *MYLK* variant regulates asthmatic inflammation via alterations in mRNA secondary structure. *European J Human Genetics.* [Epub November 2014], PMID: 25271083, 2015.

441. Tang H, Chen J, Fraidenburg D, Song S, Sysol J, Drennan A, Offermanns S, Ye R, Bonini M, Minshall R, **Garcia JGN**, Machado RF, Makino A, and Yuan JXJ. Deficiency of Akt1, but not Akt2, attenuates the development of pulmonary hypertension. *American J Physiology: Lung Cell Molecular Physiology.* [Epub November 2014] 308(2): L208-20, PMID: 25416384, 2015.

442. Fu P, Usatyuk PV, Lele A, Harijith A, Gregorio CC, **Garcia JG**, Salgia R, Natarajan V. C-Abl mediated tyrosine phosphorylation of paxillin regulates LPS-induced endothelial dysfunction and lung injury. *American J Physiology: Lung Cellular Molecular Physiology.* [Epub March 2015], 308(10): L1025-38, PMID: 25795725, 2015.

443. Audrito V, Serra S, Brusa D, Mazzola F, Arruga F, Vaisitti T, Coscia M, Maffei R, Rossi D, Wang T, Inghirami G, Rizzi M, Gaidano G, **Garcia JGN,** Wolberger C, Raffaelli N, and Deaglio S. Nicotinamide phosphoribosyltransferase (NAMPT) induces differentiation of monocytes to M2 macrophages in chronic lymphocytic leukemia. *Blood.* [Epub November 2014] 125(1):111-23, PMID: 25368373, 2015.

444. Letsiou E, Sammani S, Zhang W, Zhou T, Quijada H, Moreno-Vinasco L, Dudek SM, and **Garcia JG**. Pathologic mechanical stress and endotoxin exposure increases lung endothelial microparticle shedding. *American J Respiratory Cell Molecular Biology*. [Epub November 2014] PMID: 25029266, 2015.

445. Letsiou E, Rizzo AN, Sammani S, Naureckas P, Jacobson JR, **Garcia JG**, and Dudek SM. Differential and opposing effects of imatinib on LPS- and ventilator-induced lung injury. *American J Physiology: Lung Cell Molecular Physiology* [Epub December 2014] 308(3): L259-69, PMID: 25480336, 2015.

446. Feldman AM, Runge MS, **Garcia JG**, and Rubenstein AH. American medical education at a crossroad. *Science Translational Medicine*. 7: 285, 285fs17, PMID: 25925678, 2015.

447. Wang L, Bittman R, **Garcia JG**, and Dudek SM. Junctional complex and focal adhesion rearrangement mediates pulmonary endothelial barrier enhancement by FTY720 S-phosphonate. *Microvascular Research*. [Epub April 2015] 99:102-109, PMID: 25862132, 2015.

448. Acosta-Herrera M, Pino-Yanes M, Ma SF, Barreto-Luis A, Corrales A, Cumplido J, Pérez-Rodríguez E, Campo P, Eng C, García-Robaina JC, Quintela I, Villar J, Blanca M, Carracedo Á, Carrillo T, **Garcia JGN,** Burchard EG, and Flores C. Fine mapping of the myosin light chain kinase gene replicates the association with asthma in Spanish descent populations. *J Allergy Clinical Immunology*. S0091-6749(15)00587-4. doi:. PMID: 26025125, 2015.

449. Pouladi N, Bime C, **Garcia JGN,** and Lussier YA. Complex genetics of pulmonary diseases: lessons from GWAS and next-generation sequencing. *Translational Research*. [Epub May 2015] S1931-5244(15)00142-5. doi: 10.1016/j.trsl.2015.04.016. PMID: 26006746, 2015.

450. Zhang X, Zhang W, Saraf SL, Nouraie M, Han J, Gowhari M, Hassan J, Miasnikova G, Sergueeva A, Nekhai S, Kittles R, Machado RF, **Garcia JG**, Gladwin MT, Steinberg MH, Sebastiani P, McClain DA, Gordeuk VR. Genetic polymorphism of *APOB* is associated with diabetes mellitus in sickle cell disease. *Human Genetics* [Epub May 2015] 134(8): 895-904. PMID: 26025476, 2015.

451. Wang X, Bleher M, Brown ME, **Garcia JGN**, Dudek SM, Shekhawat G, and Dravid V. Nano-biomechanical study of spatio-temporal cytoskeleton rearrangements that determine subcellular mechanical properties and endothelial permeability. *Nature Scientific Reports*. 18;5:11097. doi: 10.1038/srep11097. PMID: 26086333, 2015.

452. Zhou T, Wang T, **Garcia JG.** A nonmuscle myosin light chain kinase-dependent gene signature in peripheral blood mononuclear cells is linked to human asthma severity and exacerbation status. *Pulmonary Circulation*. 5(2): 335-8. doi: 10.1086/680357. PMID: 26064459, 2015.

453. Shen K, Brown ME, Ramirez B, Mapes B, Shen GR, Santarsiero B, Ishii Y, Dudek SM, and **Garcia JG**. Structure–function analysis of the non-muscle myosin light chain kinase (nmMLCK) by NMR spectroscopy and molecular modeling: influence of coding genetic variants. *PLOS One*. 10(6): e0130515. doi: 10.1371/journal.pone.0130515. PMID: 26111161, 2015.

454. Camp SM, Ceco E, Evenoski CL, Danilov SM, Zhou T, Chiang ET, Moreno-Vinasco L, Mapes B, Zhao J, Gursoy G, Brown ME, Adyshev DM, Siddiqui SS, Quijada H, Sammani S, Letsiou E, Saadat L, Wang T, Liang J, and **Garcia JGN**. Unique toll-like receptor 4 activation by NAMPT/PBEF induces NFkB signaling and inflammatory lung injury. *Nature: Scientific Reports*. 5:13135. doi: 10.1038/srep13135. PMID: 26272519, 2015.

455. Camp SM, Chiang ET, Sun C, Usatyuk PV, Natarajan V, Bittman R, **Garcia JG**, and Dudek SM. Pulmonary endothelial cell barrier enhancement by novel FTY720 analogs: methoxy-FTY720, fluoro-

FTY720, and b-glucuronide-FTY720. *Chemistry & Physics of Lipids.* [Epub August 2015] 191:16-24; PMID: 26272033, 2015b.

456. Huang LS, Berdyshev EV, Tran JT, Xie L, Chen J, Ebenezer DL, Mathew B, Gorshkove I,Zhang W, Reddy SP, Harjith A, Wang G, Feghali-Bostwick C, Not I, Ma SF, Zhou T, Ma W, **Garcia JGN,** and Natarajan V. Sphingosine 1-phosphate lyase is an endogenous suppressor of pulmonary fibrosis: Role of S1P signaling and autophagy. *Thorax.* [Epub August 2015] 70(12):1138-48, PMID: 26286721, 2015.

457. Saraf SL, A Oh, P Patel, K Sweiss, M Koshy, S Campbell-Lee, M Gowhari, J Hassan, D Peace, J Quigley, I Khan, R Molokie, L Hsu, N Mahmud, D Levinson, **JGN Garcia,** VR Gordeuk, D Rondelli. Non-myeloablative stem cell transplant with alemtuzumab/low dose irradiation to cure and improve the quality of life of adults with sickle cell disease. *Biology of Bone Marrow Transplantation.* [Epub September 2015] S1083-8791, PMID: 26348889, 2015.

458. Rizzo AN, Letsiou E, A Espina, Sammani S, Jacobson JR, **Garcia JG**, Dudek SM. Imatinib attenuates inflammation and vascular leak in a clinically relevant two-hit model of acute lung injury. *American J Physiology: Lung Cellular Molecular Physiology.* [Epub October 2015]; 309(11): L1294-304, PMID: 26432864, 2015.

459. Mathew B, Takakoshi D, Sharma R, Mitra S, Smith B, Desai A, Weichselbaum RR, **Garcia JGN**, Jacobson JR. Role of GADD45a in murine models of radiation- and bleomycin-induced lung injury. *American J Physiology: Lung Cell Molecular Physiology.* [Epub October 2015] 309(12):L1420-9, PMID: 26498248, 2015.

460. Song S, K Jacobson, K McDermott, S Reddy, A Cress, S Dudek, S Black, **JGN Garcia,** A Makino, J Yuan. ATP promotes cell survival via regulation of cytosolic [Ca2+] and Bcl-2/Bax ratio in lung cancer cells. *American J Physiology: Cellular Physiology.* [Epub October 2015] 310(2):C99-114. PMID: 26491047, 2015.

461. Chen W, Epshtein Y, Ni X, Dull RO, Cress AE, **Garcia JG**, Jacobson JR. Role of integrin β4 in lung endothelial cell inflammatory responses to mechanical stress. *Nature: Scientific Reports.* 5:16529. doi: 10.1038. PMID: 26572585, 2015

462. Choi S, Camp SM, Dan A, **Garcia JGN,** Dudek SM, and Leckband D. A genetic variant of cortactin linked to acute lung injury impairs lamellipodia dynamics and endothelial wound healing. *American J Physiology: Lung Cellular Molecular Physiology.* [Epub November 2015] 309(9): L983-94. doi: 10.1152. PMID 26361873, 2015.

463. Huang Y, Ma SF, Vij R, Oldham J, Herazo-Maya J, Broderick SM, Strek ME, White SR, Hogarth DK, Sandbo NK, Lussier YA, Gibson K, Kaminski N, **Garcia JGN,** and Noth I. A functional genomic model for predicting prognosis in idiopathic pulmonary fibrosis. *BMC Pulmonary Medicine.* 21;15(1):147. PMID: 26589497, 2015.

464. Casanova N, Zhou T, Knox KS, **Garcia JGN**. Identifying novel biomarkers in sarcoidosis using genome-based approaches. *Clinics Chest Medicine,* [Epub September 2015], 36(4):621-30. PMID: 26593137, 2015.

465. Li H, N Pouladi, I Achour, V Gardeux, J Li, Q Li, HH Zhang, FD Martinez, **JG Garcia**, Y Lussier. eQTL networks unveil enriched mRNA master integrators downstream of complex disease-associated SNPs. *J Biomedical Informatics.* [Epub October 2015], 58:226-34. PMID: 26524128, 2015.

466. Qian Z, Zhou T, Gurguis CI, Xu X, Wen Q, Lv J, Fang F, Hecker L, Cress AE, Natarajan V, Jacobson JR, Zhang DD, **Garcia JG**, Wang T. Nuclear factor, erythroid 2-like 2-associated molecular signature predicts lung cancer survival. *Nature: Scientific Reports*. 5:16889. doi: 10.1038. PMID: 26596768, 2015.

467. Shimizu Y, SM Camp, X Sun, T Zhou, T Wang, **JGN Garcia**. Sp1-mediated nonmuscle MLCK and enhanced activity in VEGF-induced vascular permeability. *Pulmonary Circulation*. 5:707-715, PMID: 684124, 2015.

468. Fu P, Usatyuk PV, Jacobson J, Cress AE, **Garcia JG**, Salgia R, Natarajan V. Role played by paxillin and paxillin tyrosine phosphorylation in hepatocyte growth factor/sphingosine-1-phosphate-mediated reactive oxygen species generation, lamellipodia formation, and endothelial barrier function. *Pulmonary Circulation*, 5(4): 619-30; PMID: 26697169, 2015.

469. Tao S, Rojo de la Vega M, Quijada H, Wondrak GT, Wang T, **Garcia JG**, Zhang DD. Bixin protects mice against ventilation-induced lung injury in an NRF2-dependent manner. *Nature: Scientific Reports*. 6:18760. PMID: 26729554, 2016.

470. Rafikova O, Meadows ML, Kinchen JM, Mohney RP, Maltepe E, Desai AA, Yuan JX, **Garcia JG**, Fineman JR, Rafikov R, Black SM. Metabolic changes precede the development of pulmonary hypertension in the monocrotaline-exposed rat lung. *PLoS One*. 11(3): e0150480. PMID: 26937637, 2016.

471. Barreto-Luis A, Pino-Yanes M, Corrales A, Campo P, Callero A, Acosta-Herrera M, Cumplido J, Ma SF, Martinez-Tadeo J, Villar J, **Garcia JG**, Carrillo T, Carracedo Á, Blanca M, Flores C. Genome-wide association study in Spanish identifies ADAM metallopeptidase with thrombospondin type 1 motif, 9 (ADAMTS9), as a novel asthma susceptibility gene. *J Allergy Clinical Immunology* [Epub November 2015], S0091-6749 01517-1. PMID: 2662059, 2016.

472. Mirsaeidi M, MM Banoei, CK Nienow, T Abassi, A Hakim, D Schraufnagel, BW Winston, N Sweiss, R Baughman, **JGN Garcia,** R Machado. Plasma metabolomic profile in fibrosing pulmonary sarcoidosis. *Sarcoidosis, Vasculitis and Diffuse Lung Diseases*. 33(1):29-38. PMID: 27055833, 2016.

473. Sun X, Kellner M, Desai AA, Wang T, Lu Q, Kangath A, Qu N, Klinger C, Fratz S, Yuan JX, Jacobson JR, **Garcia JG**, Rafikov R, Fineman JR, Black SM. Asymmetric dimethylarginine stimulates Akt1 phosphorylation via Hsp70-facilitated CTMP degradation in pulmonary arterial endothelial cells. *American J Respiratory Cell Molecular Biology*. [Epub March 2016], 55(2):275-87. PMID 26959555, 2016.

474. Tang H, A Yamamura, H Yamamura, S Song, D Fraidenburg, J Chen, Y Gu, N Pohl, T Zhou, L Perez, R Ayon, A Desai, D Goltzman, F Rischard, Z Khalpey, S Black, **JGN Garcia,** A Makino, and J Yuan. Pathogenic role of calcium-sensing receptors in the development and progression of pulmonary hypertension. *American J Physiology: Lung Cellular Molecular Physiology*. [Epub March 2016], 310(9): L846-59; PMID: 26968768, 2016.

475. Wang T, B Mathew, X Wu, Y Shimizu, AN Rizzo, SM Dudek, RR Weichselbaum, JR Jacobson, L Hecker, **JGN Garcia**. Non-muscle myosin light chain kinase modulates radiation-induced lung injury. *Pulmonary Circulation*. 6(2): 234-239; PMID: 26697169, 2016.

476. De La Vega MR, Dodson M, Gross C, Manzour H, Lantz RC, Chapman E, Wang T, Black SM, **Garcia JG**, Zhang DD. Role of Nrf2 and autophagy in acute lung injury. *Current Pharmacology Reports*. 2:91-101. PMID: 27313980. 2016.

477. Bime C, Zhou T, Wang T, Slepian MJ, **Garcia JG**, Hecker L. Reactive oxygen species-associated

molecular signature predicts survival in patients with sepsis. *Pulmonary Circulation.* 6(2):196-201; PMID: 27252846, 2016.

478. Xie L, Chiang ET, Min X, Kelly G, Kanteti P, Singleton PA, Camp SM, Zhou T, Dudek SM, Natarajan V, Wang T, Black S, **Garcia JG**, Jacobson JR. Regulation of thrombin-induced human lung endothelial cell barrier disruption by protein kinase C delta. *PLOS One.* 11(7): e0158865; PMID: 27442243, 2016.

479. Viswanathan P, Y Epshtein, **JGN Garcia,** M Cho, SM Dudek. Differential elastic responses to barrier-altering agonists in two types of human lung endothelium. *Biophysical Biochemical Research Communications.* [Epub August 2016] 291:31234-7, PMID: 27473658, 2016.

480. Bime, C, C Poongkunran, M Borgstrom, B Natt, H Desai, S Parthasarathy, and **JGN Garcia.** Racial and ethnic differences in mortality from severe Acute Respiratory Failure in the United States, 2008-2012. *Annals American Thoracic Society.* [Epub September 2016], 13(12):2184-2189. PMID: 27668888, 2016.

481. Indik J, V Nair, R Rafikov; IS Nyotowidjojo; J Bisla; M Kansal; DS Parikh; M Robinson; A Desai; M Oberoi; A Gupta; T Abbasi; Z Khalpey; AR Patel; RM Lang; SC Dudley; B Choi; **Garcia JGN,** RF Machado, Desai AA. Association of prolonged QTc in sickle cell disease. *PLOS One* 11:13;11(10):e0164526. PMID: 27736922, 2016.

482. Danilov SM, Luensdorf H, Nesterovitch AB, Y Epshtein, E Letsiou, Akinbi HT, OV Kryukova, T Piegeler, EZ Golukhova, Schwartz DE, RO Dull, Minshall RD, OA Kost, **Garcia JG**. Lysozyme and bilirubin bind to ACE and regulate its conformation and shedding. *Nature: Scientific Reports.* 13;6:34913. PMID: 27734897, 2016.

483. Duarte JD, AA Desai; JR Sysol; T Abassi; AR Patel; RM Lang; A Gupta; **JGN Garcia;** VR Gordeuk; RF Machado. Genome-wide analysis identifies IL-18 and FUCA2 as novel genes associated with diastolic function in sickle cell disease. *PLOS One.* 16;11(9):e0163013. PMID: 27636371, 2016.

484. Witte, MH, F Garcia, **J Garcia**, M Bernas. Mentoring's moment. (eLetter) *Science* 353:980-982 http://science.sciencemag.org/content/353/6303/980.e-letters, 2016.

485. Mirsaeidi M, Vu A, Zhang W, Arbieva Z, Zhang C, Abbasi T, Hakim A, Schraufnagel D, Sweiss N, Baughman R, **Garcia JG**, Machado RF. Annexin A11 is associated with pulmonary fibrosis in African American patients with sarcoidosis. *Sarcoidosis, Vasculitis and Diffuse Lung Diseases* 33(4):418-422. PMID: 28079857, 2016.

486. Elangovan VR, Camp S, Kelly GT, Desai A, Adyshev D, Sun X, Black S, T Wang, **JGN Garcia.** Endotoxin- and mechanical stress-induced epigenetics changes in the regulation of the *NAMPT* promoter. *Pulmonary Circulation.* [Epub May 2016]. 6(4):539-544. PMID: 28090296, 2016.

487. Singla S, T Zhou, N Casanova, K Javaid, W Zhang, SF Ma, MS Wade, I Noth, NJ Sweiss, **JGN Garcia,** RF Machado. Expression profiling elucidates a molecular gene signature which identifies pulmonary hypertension in sarcoidosis. *Pulmonary Circulation.* [Epub December 2016]. 6(4):465-471. PMID: 28090288, 2016.

488. Cairns CC, K Bollinger, and **Garcia JG**. Transformative approach to Academic Medicine: The partnership between the University of Arizona and Banner Health. *Academic Medicine.* [Epub August 2016] 92(1):20-22, PMID: 27580434, 2017.

489. Kumar S, Sun X, Noonepalle SK, Lu Q, Zemskov E, Wang T, Aggarwal S, Gross C, Sharma S, Desai AA, Hou Y, Dasarathy S, Qu N, Reddy V, Lee SG, Cherian-shaw M, Yuan JX, Catravas JD, Rafikov R, **Garcia JGN**, Black SM. Hyper-activation of pp60^{src} limits nitric oxide signaling by increasing asymmetric dimethylarginine levels during acute lung injury. *Free Radical Biolology Medicine*. 102:217-228. PMID: 27838434, 2017.

490. Slepian MJ, Sheriff J, Hutchinson M, Tran P, Bajaj N, **Garcia JG,** Saavedra S, Bluestein D. Shear-mediated platelet activation in the free flow: Perspectives on the emerging spectrum of cell mechanobiological mechanisms mediating cardiovascular implant thrombosis. *J Biomechanics*. [Epub November 2016], 50:20-25. PMID: 27887727, 2017.

491. Szilágyi KL, Liu C, Zhang X, Wang T, Fortman JD, Zhang W, **Garcia JG.** Epigenetic contribution of the myosin light chain kinase gene to risk for the Acute Respiratory Distress Syndrome. *Translational Research*. [Epub August 2016], 180:12-21, PMID: 27543902, 2017.

492. Mascarenhas JB, AY Tchourbanov, H Fan, SM Danilov, T Wang, **JGN Garcia**. Mechanical stress and single nucleotide variants regulate alternative splicing of the *MYLK* gene. *American J Respiratory Cell Molecular Biology*. [Epub August 2016] 56(1):29-37. PMID: 27529643, 2017.

493. Zhang X, Shah BN, Zhang W, Saraf SL, Miasnikova G, Sergueeva A, Ammosova T, Niu X, Nouraie M, Nekhai S, Castro O, Gladwin MT, Prchal JT, **Garcia JG**, Machado RF, Gordeuk VR. A genetic variation associated with plasma erythropoietin and a non-coding transcript of PRKAR1A in sickle cell disease. *Human Molecular Genetics*. [Epub October 2016] 25(20):4601-4609. PMID: 28173069. 2017.

494. Bime C, Fiero M, Lu Z, Oren E, Berry CE, Parthasarathy S, **Garcia JG**. High positive end expiratory pressure is associated with improved survival in obese patients with acute respiratory distress syndrome. *American J Medicine*. [Epub December 2016]. 130(2):207-213. PMID: 27984004, 2017.

495. Song S, Ayon RJ, Yamamura A, Yamamura H, Dash S, Babicheva A, Tang H, Sun X, Cordery AG, Khalpey ZI, Black SM, Desai AA, Rischard F, McDermott KM, **Garcia JG**, Makino A, Yuan JX. Capsaicin-induced Ca2+ signaling is enhanced via upregulated TRPV1 channels in pulmonary artery smooth muscle cells from patients with idiopathic PAH. *American J Physiology: Lung Cell Molecular Physiology*. [Epub December 2016]. 312: L309-L325. PMID: 7979859, 2017.

496. Wang T, Gross C, Desai A, Zemskov E, Wu X, Garcia AN, Jacobson JR, Yuan JX, **Garcia JG**, Black SM. Endothelial cell signaling and ventilator-induced lung injury (VILI): Molecular mechanisms, genomic analyses & therapeutic targets. *American J Physiology: Lung Cell Molecular Physiology*. [Epub December 2016]. 312: L415-L476. PMID: 27979857, 2017.

497. Palumbo S, YJ Shin, K Ahmad, A Desai, H Quijada, M Mohamed, A Knox, Sammani S, B Colson, T Wang, **JGN Garcia,** L Hecker. Dysregulated Nox4 ubiquitination contributes to redox imbalance and age-related severity of acute lung injury. *American J Physiology: Lung Cell Molecular Physiology*. [Epub January 2017] 312: L297-L308. PMID: 28062482, 2017.

498. Huang Y, Ma SF, Espindola MS, Vij R, Oldham JM, Huffnagle GB, Erb-Downward JR, Flaherty KR, Moore BB, White ES, Zhou T, Li J, Lussier YA, Han MK, Kaminski N, **Garcia JG**, Hogaboam CM, Martinez FJ, Noth I; COMET Investigators. Microbes associate with host innate immune response in idiopathic pulmonary fibrosis. *American J Respiratory Critical Care Medicine*. [Epub February 2017]. 196: 208-219. PMID: 28157391, 2017.

499. Chen J, JR Sysol, S Singla, T Abbasi, K Shioura, A Yamaura, S Sahni, V Reddy, A Sridhar, H Gao, J Torres, S Camp, H Tang, S Ye, S Comhair, S Erzurum, R Dweik, P Hassoun, JXJ Yuan**, JGN Garcia,**

RF Machado. Nicotinamide phosphoribosyltransferase promotes pulmonary vascular remodeling and is a therapeutic target in pulmonary arterial hypertension. *Circulation*. [Epub February 2017]. 135(16):1532-1546. PMID: 28202489, 2017.

500. Desai AA, Z Lei, N Bahroos, M Maienschein-Cline, SL Saraf, X Zhang, BN Shah, SM Nouraie, T Abbasi, AR Patel, RM Lang, Y Lussier, **JGN Garcia,** VR Gordeuk, RF Machado. Association of circulating transcriptomic profiles with mortality in sickle cell disease. *Blood*. [Epub April 2017]. 129(22):3009-3016. PMID: 28373264, 2017.

501. Celedón JC, Burchard EG, Schraufnagel D, Castillo-Salgado C, Schenker M, Balmes J, Neptune E, Cummings KJ, Holguin F, Riekert KA, Wisnivesky JP, **Garcia JGN,** Roman J, Kittles R, Ortega VE, Redline S, Mathias R, Thomas A, Samet J, Ford JG; American Thoracic Society and the National Heart, Lung, and Blood Institute. An American Thoracic Society/National Heart, Lung, and Blood Institute Workshop Report: Addressing respiratory health equality in the United States. *Annals American Thoracic Society*. 14(5):814-826. PMID: 28459618. 2017.

502. Brown R; Wang T; Chappeta V; Wu G; Onel B; Chawla R; Quijada H; Camp S; Chiang E; Lassiter Q; Lee C; Phanse S; Turnidge M; Zhao P; **Garcia JGN;** Gokhale V; Yang D; Hurley L. The consequences of overlapping G-Quadruplexes and i-Motifs in the PDGFR-β core promoter NHE can explain the unexpected effects of mutations and provide opportunities for selective targeting of both structures by small molecules to downregulate gene expression. *J American Chemical Society*. [Epub May 2017]. 139: 7456-7475. PMID: 28471683. 2017.

503. Schipper D, Louis AV, Dicken DS, Johnson K, Smolenski RT, Black SM, **JGN Garcia,** Z Khalpey. Improved metabolism and redox state with a novel preservation solution: implications for donor lungs after cardiac death (DCD). *Pulmonary Circulation*. [Epub May 2017]. 7(2):494-504. PMID: 28597777. 2017.

504. Wang T, Shimizu Y, Wu X, Kelly GT, Xu X, Wang L, Qian Z, Chen Y, **Garcia JGN**. Particulate matter disrupts human lung endothelial cell barrier integrity via Rho-dependent pathways. *Pulmonary Circulation*. [Epub June 2017]. 7(3):617-623. PMID: 28644070. 2017.

505. Zhou T, N Casanova, N Pouladi, T Wang, Y Lussier, KS Knox, **JGN Garcia**. Identification of Jak-STAT signaling involvement in sarcoidosis severity via a novel microRNA-regulated peripheral blood mononuclear cell gene signature. *Nature: Scientific Reports*. 26;7(1):4237. PMID: 2865258. 2017.

506. Belvitch P, Brown ME, Brinley BN, Letsiou E, Rizzo AN, **Garcia JGN,** Dudek SM. The ARP 2/3 complex mediates endothelial barrier function and recovery. *Pulmonary Circulation*. [Epub March 2017], 7(1):200-210. PMID: 28680579. 2017.

507. Sun X, Mathew B, Sammani S, Jacobson JR, **Garcia JG**. Simvastatin-induced sphingosine 1-phosphate receptor 1 expression is KLF2-dependent in human lung endothelial cells. *Pulmonary Circulation*. 7(1):117-125. PMID: 28680571. 2017.

508. Huang LS, P Jiang, C Feghali-Bostwick, SP Reddy, **JGN Garcia,** V Natarajan. Lysocardiolipin acyltransferase regulates TGF-β mediated lung fibroblast to myofibroblast differentiation: Role of mitochondrial ROS and NOX4. *Free Radical Biology and Medicine*. [Epub August 2017], 112: 162-173. PMID: 28751023. 2017.

509. Tikhomirova VE, Kost OA, Kryukova OV, Golukhova EZ, Bulaeva NI, Zholbaeva AZ, Bokeria LA, **Garcia JGN,** Danilov SM. ACE phenotyping in human heart. *PLoS One*. 12(8): e0181976. PMID: 28771512. 2017.

510. Vanderpool RR, Desai AA, Knapp SM, M Simon, Abidov, LM Hansen, S Knoper, JX Yuan, **JGN Garcia,** HC Champion, LM Hansen, R Naeije, Rischard FP. How prostacyclin therapy improves right ventricular function in pulmonary arterial hypertension. *European Respiratory J*. [Epub August 2017]. 50(2). PMID: 28838981. 2017

511. Wu K, Zhang Q, Wu X, Lu W, Tang H, Liang Z, Gu Y, Song S, Ayon RJ, Wang Z, McDermott KM, Balistrieri A, Wang C, Black SM, **Garcia JGN,** Makino A, Yuan JX, Wang J. Chloroquine is a potent pulmonary vasodilator that attenuates hypoxia-induced pulmonary hypertension. *British J Pharmacology*. [Epub August 2017]. 174: 4155-4172. PMID: 28849593. 2017.

512. Herazo-Maya JD, J Sun, P Molyneaux, J Villalba-Nunez, A Tzouvelekis, Q Li, H Lynn, BM Juan-Guardela, X Yan, G Michel, N Aurelien, KO Lindell, MJ Klesen, Y Zhang, H Zhao, **JGN Garcia,** I Noth, A Prasse, Z Bar-Joseph, KF Gibson, E Herzog, IO Rosas, T Maher, N Kaminski. A 52-gene signature in peripheral blood identifies a genomic profile associated with increased risk of mortality and poor disease outcomes in Idiopathic Pulmonary Fibrosis. *Lancet Respiratory Medicine*. [Epub September 2017], S2213-2600. PMID: 28942086. 2017.

513. Talwar A, **JGN Garcia,** H Tsai, M Moreno, T Lahm, RT Zamanian, R Machado, S Kawut, M Selej, S Mathai, L D'Anna, S Sahni, EJ Rodriquez, R Channick, K Fagan, J Armstrong, J Rodriguez Lopez, V McLaughlin, V de Jesus Perez. Health equality for patients with pulmonary arterial hypertension: a blueprint for action. *American J Respiratory Critical Care Medicine*. 196(8): e32-e47. PMID:29028375. 2017.

514. Wang X, L Wang, **JGN Garcia,** S Dudek, G Shekhawat, V Dravid. Imatinib alters agonists-mediated cytoskeletal biomechanics in lung endothelium. *Nature: Scientific Reports*. [Epub October 2017]. 7(1):14152. PMID: 29075042. 2017.

515. Mascarenhas JB, AY Tchourbanov, SM Danilov, T Zhou, T Wang, **JGN Garcia.** The splicing factor hnRNPA1 regulates alternate splicing of the *MYLK* gene. *American J Respiratory Cell Molecular Biology*. [Epub October 2017], PMID: 29077485. 2017.

516. Rosas IO, H Goldberg, H Collard, S El-Chemaly, K Flaherty, G Hunninghake, J Lasky, T King, D Lederer, R Machado, FJ Martinez, R Maurer, D Teller, I Noth, E Peters, G Raghu, **Garcia JG**, Choi A. A Phase II clinical trial of low dose inhaled carbon monoxide in idiopathic pulmonary fibrosis. *Chest*. [Epub November 2017], 153: 94-104. PMID: 29100885. 2017.

517. Tang H, A Babicheva, K McDermott, Y Gu, R Ayon, S Song, A Gupta, T Zhou, X Sun, S Dash, Z Wang, A Cordery, A Desai, F Rischard, Z Khalpey, J Wang, S Black, **JGN Garcia**, A Makino, J Yuan. Endothelial HIF-2α contributes to severe pulmonary hypertension due to endothelial-to-mesenchymal transition. *American J Physiology: Lung Cell Molecular Physiology*. [Epub October 2017), 314: L256-L275. PMID: 29074488. 2018.

518. Gross C, Kellner M, Noonepalle S, Aggarwal S, Wang T, Lu Q, Zemskov E, Kangath A, Kumar S, Gonzalez-Garay ML, Desai A, Verin A, Klinger C, JD Catravas, Jacobson JR, Yuan J, **Garcia JGN,** Black S. LPS-induced acute lung injury involves the NFK-κb-mediated downregulation of Sox18. *American J Respiratory Cell Molecular Biology*. [Epub November 2017], PMID: 29115856. 2018.

519. Wang X, L Wang, **JGN Garcia,** S Dudek, G Shekhawat, V Dravid. The significant role of c-Abl kinase in barrier-altering agonists-mediated cytoskeletal biomechanics. *Nature: Scientific Reports*. [Epub January 2018]. 8(1):1002. PMID: 29343719. 2018

520. Oita RC, W Ma, SM Chiang, E Ceco, M Harbeck, P Singleton, J Messana, T Wang, **JGN Garcia**. Novel mechanism for nicotinamide phosphoribosyltransferase (NAMPT) inhibition of TNFα-mediated

apoptosis in human lung endothelial cells. *American J Respiratory Cell Molecular Biology*. [Epub January 2018], PMID: 29337590. 2018.

521. Bime C, N Pouladi, S Sammani, K Batai, N Casanova, T Zhou, CL Kempf, X Sun, SM. Chiang, T Wang, RA Kittles, YA Lussier, TK Jones, JP Reilly, NJ Meyer, JD Christie, J Karnes, M Gonzalez-Garay, DC Christiani, CR Yates, M Wurfel, GU Meduri, **JGN Garcia.** Genome-wide association study in African Americans with Acute Respiratory Distress Syndrome identifies the Selectin P ligand gene as a risk factor. *American J Respiratory Critical Care Medicine*. [Epub February 2018], PMID: 29425463. 2018.

522. Whitaker M, Nair V, Sinari S, Dherange P, Natarajan B, Trutter L, Brittain E, Hemnes A, Austin E, Patel K, Black S, **Garcia JGN**, Yuan J, Vanderpool R, Rischard F, Makino A, Bedrick E, Desai A. Diabetes mellitus associates with increased right ventricular afterload and remodeling in pulmonary arterial hypertension. *American J Medicine*. [Epub February 2018], PMID: 29421869, 2018.

523. Wang T, ME Brown, GT Kelly, Chiang S, Mascarhenas JB, Sun X, SM Dudek, **JGN Garcia.** Myosin light chain kinase (*MYLK*) coding polymporphisms modulate human lung endothelial cell barrier responses via altered phosphorylation, spatial localization and lamellipodial protrusions. *Pulmonary Circulation*. (Epub February 2018). PMID: 29480069, 2018.

524. Lynn H, Sun X, Siegler J, Han YJ, Llor X, Ma SF, Elangovan V, Gonzales-Garay M, T Wang, Karnes J, Adyshev DM, Kittles R, Ellis NA, **Garcia JG**. Myosin light chain kinase pseudogene (*MYLKP*) harbors susceptibility genetic variants that confer risk for colorectal cancer. *PLOS One*. 12(8): e0181976. PMID: 28771512, 2018.

525. Kurdyukov S, CA Eccles, AA Desai, MGonzalez-Garay, J X.-J. Yuan, **JGN Garcia,** O Rafikova, R Rafikov. New cases of glucose-6-phosphate dehydrogenase deficiency in Pulmonary Arterial Hypertension. *PLoS One*. 13(8):e0203493. 2018. PMID: 30161219, 2018

526. Liu P, M Rojo de la Vega, S Sammani, JB Mascarenhas, M Kerins, M Dodson, X Sun, T Wang, A Ooi, **JGN Garcia*,** DD Zhang*. *MYLK* transcriptional repression by NRF2-ARE and RPA1 enhances vascular integrity. *Co-senior authors. *Proceedings of the National Academy of Science (PNAS)* (Epub October 2018) 115(44):E10352-E10361. PMID: 30309964. 2018.

527. Marciniak A, Camp SM, **Garcia JGN,** Polt R. An update on sphingosine 1-phosphate receptor 1 modulators. *Bioorganic Medicinal Chemistry Letters*. S0960-894X(18)30844-8 [Epub November 2018]. PMID: 30409535. 2018.

528. Tang H, Wu K, Wang J, Vinjamuri S, Gu Y, Song S, Wang Z, Zhang Q, Balistrieri A, Ayon RJ, Rischard F, Vanderpool R, Chen J, Zhou G, Desai AA, Black SM**, Garcia JGN**, Yuan JX, Makino A. Pathogenic role of mTORC1 and mTORC2 in pulmonary hypertension. *J American College Cardiology: Basic Translational Science*. (Epub December 2018) (6):744-762. PMID: 30623134. 2018.

529. Wang Z, K Yang, Q Zheng, H Tang, A Babicheva, Q Jiang, C Zhang, M Li, Y Chen, S Carr, K Wu, Q Zhang, A Balistrieri, C Wang, S Song, R Ayon, A Desai, S Black, **JGN Garcia,** A Makino, J Yuan, W Lu, J Wang. Divergent changes of p53 in pulmonary arterial endothelial and smooth muscle cells involved in the development of pulmonary hypertension. *American J Physiology: Lung Cell Molecular Physiology*. (Epub October 2018), PMID: 30358436. 2019.

530. Rhodes CJ, K Batai, M Bleda, M Haimel, L Southgate, M Germain, MW Pauciulo, C Hadinnapola, B Girerd, A Arora, J Knight, KB Hanscombe, JH Karnes, M Kaakinen, H Gall, A Ulrich, L Harbaum, J Aman, I Cebola, J Ferrer, NIHR BioResource – Rare Diseases Consortium, FAhmad, M Aldred, P Amouyel, SL Archer, R Argula, ED Austin, D Badesch, S Bakshi, C Barnett, R Benza, N Bhatt, HJ

Bogaard, CD Burger, M Chakinala, C Church, JG Coghlan, R Condliffe, PA Corris, C Danesino, S Debette, CG Elliott, J Elwing, M Eyries, RW Simms, T Fortin, A Franke, RP Frantz, Adaani Frost, **JGN Garcia,** S Ghio, HA Ghofrani, JSR Gibbs, Hua He, NS Hill, R Hirsch, AC Houweling, LS Howard, D Ivy, DG Kiely, J Klinger, G Kovacs, T Lahm, M Laudes, RD Machado, RV MacKenzie Ross, LJ Martin, S Moledina, D Montani, SD Nathan, M Newnham, A Olschewski, H Olschewski, RJ Oudiz, WH Ouwehand, AJ Peacock, J Pepke-Zaba, Z Rehman, I Robbins, DM Roden, EB Rosenzweig, G Saydain, L Scelsi, R Schilz, W Seeger, CM Shaffer, M Simon, O Sitbon, J Suntharalingam, E Swietlik, AY Tchourbanov, T Thenappan, F Torres, MR Toshner, CM Treacy, AV Noordegraaf, Q Waisfisz, RE Walter, J Wharton, RJ White, J Wilt, SJ Wort, D Yung, A Lawrie, M Humbert, F Soubrier, DA Trégouët, I Prokopenko, R Kittles, S Gräf, WC Nichols, RC Trembath, AA Desai, NW Morrell, Martin R. Wilkins. Genetic determinants of risk and survival in pulmonary arterial hypertension. *Lancet Respiratory Medicine.* (Epub December 2018), PMID: 30527956. 2019.

531. Wang M, JT Hintona J Gard, **JGN Garcia,** BS Knudsen, RB Nagle, AE Cress. Integrin α6β4E variant in normal prostate epithelial cells modifies biophysical properties of cell-cell and cell-ECM interactions. *Molecular Biology of the Cell.* (Epub March 2019); 30(7):838-850. PMID: 30865564. 2019.

532. Vanderpool R, R Puri, A Osorio, K Wickstrom, AA Desai, SM Black, **JGN Garcia**, JXJ Yuan, FP Rischard. Surfing the Right Ventricular Pressure Waveform: Methods to assess global, systolic and diastolic RV Function from a clinical right heart catheterization. *Pulmonary Circulation.* (Epub April 2019). PMID: 31032737. 2019.

533. Lynn H, X Sun, N Casanova, M Gonzales Ganay, C Bime, **JGN Garcia**. Genomic and genetic approaches to deciphering Acute Respiratory Distress Syndrome: Oxidative stress, inflammatory and signaling genes/pathways. *Antioxidants & Redox Signaling.* (Epub April 2019). 31(14):1027-1052. PMID: 31016989. 2019.

534. Rubenstein R, Jaime M.C. Gard, M Wang, J McGrath, N Ingabire, J Hinton, K Marr, S Simpson, R Nagle, C Miranti, N Warfel, **JGN Garcia**, H Arif-Tiwari, A Cress. Gene editing of α6 integrin inhibits muscle invasive networks and increases cell-cell biophysical properties in prostate cancer. *Cancer Research* [Epub July 2019] PMID: 31337652. 2019.

535. Casanova N, T Zhou, ML Gonzalez-Garay, IO Rosas, HJ Goldberg, HR Collard, S El-Chemaly, KR Flaherty, GM Hunninghake, JA Lasky, DJ Lederer, RF Machado, FJ Martinez, I Noth, E Peters, G Raghu, AMK Choi, **JGN Garcia.** Low dose carbon monoxide exposure in idiopathic pulmonary fibrosis produces a CO signature comprised of oxidative phosphorylation genes. *Nature: Scientific Reports.* [Epub October 2019]. PMID: 31615996. 2019.

536. Brazee PL, L Morales-Nebreda, N Magnani, **JGN Garcia**, AV Misharin, KM Ridge, GR Budinger, K Iwai, LA Dada, JI Sznajder. Linear ubiquitin assembly complex regulates lung epithelial driven responses during influenza infection. *J Clinical Investigation.* [Epub November 2019), PMID: 31714898. 2019.

537. Danilov SM, R Metzger, E Klieser, K Sotlar, IN Trakht, **JGN Garcia.** Tissue ACE phenotyping in lung cancer. *PLOS One.* [Epub December 2019]. PMID: 31877149. 2019.

538. Bime C, Casanova N, Oita RC, Ndukum J, Lynn H, Camp SM, Lussier Y, Abraham I, Carter D, Miller EJ, Mekontso-Dessap A, Downs CA, **Garcia JGN.** Development of a biomarker mortality risk model in acute respiratory distress syndrome. *Critical Care.* 16;23(1):410. doi: 10.1186/s13054-019-2697. PMID: 31842964. 2019.

539. Karnes JH, Weiner HW, Schwantes-An T, Natarajan B, Sweatt AJ, Chaturvedi A, Arora A, Batai K, Nair V, Steiner HE, Giles JB, Yu J, Hosseini M, Pauciulo MW, Lutz KA, Coleman AW, Feldman J, Vanderpool R, Tang H, **Garcia JGN,** Yuan JXJ, Kittles R, Perez VDJ, Zamanian RT, Rischard F, Tiwari HK, Nichols WC, Benza RL, Desai AA. Genetic admixture and survival in diverse populations with pulmonary arterial hypertension. *American J Respiratory Critical Care Medicine.* [Epub January 2020] PMID: 31916850. 2020.

540. Chen Y; W Lu; K Yang; X Duan M Li; X Chen; J Zhang; Kuang M; S Liu; X Wu; G Zou; C Liu; C Hong; W He; J Liao; C Hou; Z Zhang; J Chen; N Zhang; H Tang; RR Vanderpool; AA Desai; F Rischard; SM Black; **JGN Garcia**; A Makino; J Yuan; N Zhong, Wang J. Tetramethylpyrazine, a promising drug for treatment of pulmonary hypertension. *British J Pharmacology.* [Epub January 2020], 77(12):2743-2764. PMID 31976548. 2020.

541. Molugu TR, RC Oita, U Chawla, T Wang, MF Brown, **JGN Garcia.** Nicotinamide phosphoribosyl-transferase purification using SUMO expression system. *Analytical Biochemistry* [Epub February 2020] PMID 31982408. 2020.

542. Badagliacca R, Rischard F, Papa S, Kubba S, Vanderpool R, Yuan JX, **Garcia JGN,** Airhart S, Poscia R, Pezzuto B, Manzi G, Miotti C, Luongo F, Scoccia G, Sciomer S, Torre Rn Msn R, Fedele F, Vizza CD. Clinical implications of idiopathic pulmonary arterial hypertension phenotypes defined by cluster analysis. *J Heart Lung Transplant.* [Epub February 2020], 39(4):310-320. PMID 32061507. 2020.

543. Camp SM, A Marciniak, ET Chiang, AN Garcia, R Bittman, R Polt, RG Perez, SM Dudek, **JGN Garcia.** S1P receptor-independent lung endothelial cell barrier disruption induced by FTY720 regioisomers. *Pulmonary Circulation.* [Epub March 2020], PMID 32096779. 2020.

544. Sun X, Sun B, Babicheva A, Vanderpool R, Pita R, Saamani S, Gupta A, Tang H, Kempf C, Casanovas N, Camp S, Lynn H, Ahmed M, Desai AA, Yuan JX, **Garcia JG**. Direct involvement of extracellular NAMPT in development of pulmonary hypertension and vascular remodeling: Transcriptional regulation by SOX and HIF2a. *American J Respiratory Cell Molecular Biology*, [Epub March 2020], 63(1):92-103. PMID 321142369. 2020.

545. Marciniak A, SM Camp, **JGN Garcia,** R Polt. *In Silico* docking studies of fingolimod and analogues to $S1P_1$. *Frontiers in Pharmacology.* [Epub March 2020], PMID 32210822. 2020.

546. Cai H, **Garcia JGN,** Wang C. More to add to E-Cigarette regulations: Unified approaches. *Chest.*; 157(4):771-773. PMID: 32252929. 2020

547. Rizzo A, P Belvitch, R Demeritte, **JGN Garcia,** E Letsiou, S Dudek. Arg mediates LPS-induced disruption of the pulmonary endothelial barrier. *Vascular Pharmacology.* [Epub May 2020], PMID: 32240815. 2020.

548. Younger S, H Jang, HA Davies, MJ Niemiec, **JGN Garcia,** R Nussinov, RQ Migrino, J Madine, FT Arce. Medin oligomer membrane pore formation: A potential mechanism of vascular dysfunction. *Biophysical J* [Epub May 2020], 118:2769-2782. PMID: 32402244. 2020.

549. Bime C, SM Camp, N Casanova, RC Oita, J Ndukum, H Lynn, **JGN Garcia.** The Acute Respiratory Distress Syndrome biomarker pipeline: Crippling gaps between discovery and clinical utility. *Translational Research.* [Epub June 2020], 226:105-115. PMID: 32599095. 2020.

550. Casanova N, Zhou T, M Gonzales Garay, Lussier, N Sweiss, SF Ma, I Noth, KS Knox, **JGN Garcia.** MicroRNA and protein-coding gene expression analysis in idiopathic pulmonary fibrosis yields novel

biomarker signatures associated to survival. *Translational Research.* [Epub July 2020], PMID. 32711186. 2020.

551. Mosier JM, S Sammani, C Kempf, E Unger, **JGN Garcia**. The impact of intravenous dodecafluoropentane on a murine model of acute lung injury. b*ioRxiv* [Epub August 2020], doi.org/10.1101/2020.08.17.253658. 2020.

552. Jiang J, K Huang, S Xu, **JGN Garcia,** C Wang, HL Cai. Targeting NOX4 alleviates sepsis-induced acute lung injury via attenuation of redox-sensitive activation of CaMKII-ERK1/2-MLCK and endothelial cell barrier dysfunction. *Redox Biology J.* [Epub September 2020], PMID 32863203. 2020.

553. Sun BL, Sun X, Casanova N, Garcia AN, Oita R, Algotar AM, Camp SM, Hernon VR, Gregory T, Cress AE, **Garcia JGN.** Role of secreted extracellular nicotinamide phosphoribosyltransferase (eNAMPT) in prostate cancer progression: Novel biomarker and therapeutic target. *EBioMedicine.* [Epub October 2020]. PMID: 33045468. 2020.

554. Wu K, Tang H; Lin R; Carr S; Wang Z; Babicheva A; Ayon R; Jain P; Xiong M; Rodriguez M; Rahimi S; Balistrieri F; Rahimi S; Valdez-Jasso D; Simonson T; Desai AA; **Garcia JGN,** Shyy J; Thistlethwaite PA; Wang J; Makino A; Yuan J. Endothelial PDGF-mediated activation of smooth muscle PDGF receptors in pulmonary arterial hypertension. *Pulmonary Circulation* [Epub December 2020]. PMID: 33294172. 2020.

555. Romanoski CE, X Qi, S Sangam, R Vanderpool, R Spearman, A Conklin, M Gonzalez-Garay, F Rischard, A Babicheva, RJ Ayon, J Wang, Y Shi, H Tang, A Makino, M Geraci, **JGN Garcia,** J X.-J. Yuan, AA Desai. Transcriptomic profiles in pulmonary arterial hypertension associate with disease severity and identify novel candidate genes. *Pulmonary Circulation.* [Epub December 2020]. PMID: 33343881. 2020.

556. Casanova NG, Gonzalez-Garay ML, Sun B, Bime C, Sun X, Knox KS, Crouser ED, Sammani N, Gonzales T, Natt B, Chaudhary S, Lussier Y, **Garcia JGN.** Differential transcriptomics in sarcoidosis lung and lymph node granulomas with comparisons to pathogen-specific granulomas. *Respiratory Research.* [Epub December 2020]. 4;21(1):321. PMID: 33276795. 2020.

557. Bime C, N Casanova, J Nikolich-Zugich, KS Knox, S Camp, **JGN Garcia.** Strategies to DAMPen COVID-19-mediated lung and systemic inflammation and vascular injury. *Translational Research.* [Epub December 2020]. PMID: 33358868. 2020.

558. Gupta A, Yilmaz, S, Sangam, S, Batai K, Sangam, S, Nair N, Indik J, Machado RF, Kittles R, Gupta G, Kim TY, Shi G, Weigand K, Fleming I, Rutledge C, Groth J, Juneman E, Goldman S, Hillery C, **Garcia JGN**, Dudley SC, Choi B, Desai AA. IL-18 is a novel mediator of prolonged QTc and ventricular arrhythmias associated with murine sickle cell cardiomyopathy. *Blood* [Epub November 2020], PMID: 33181835. 2021.

559. Quijada H, T Bermudez, AN Garcia, CL Kempf, SM Camp, K Burns, DG Valera, L Moreno-Vinasco, JK Burt, B Sun, J Mascarhenas, A Gaber, R Oita, V Reyes Hernon, X Sun, A Cress, Natarajan V, Jacobson JR, Dudek SM, D Martin, C Barber, Z Liu, C Bime, S Sammani, **JGN Garcia**. Endothelial eNAMPT amplifies preclinical acute lung injury: Efficacy of an eNAMPT-neutralizing mAb. *European Respiratory J.* [Epub October 2020], PMID: 33243842. 2021.

560. Liu P, G Luo, M Dodson, CJ Schmidlin, Y Wei, B Kerimoglu, A Ooi, E Chapman, **Garcia JGN,** Zhang DD. The NRF2-LOC344887 signaling axis suppresses pulmonary fibrosis. *Redox Biology* (Epub October 2020), PMID: 33126057. 2021.

561. Harryman WL, RB Nagle, KD Marr, D Hernandez-Cortes, **JGN Garcia,** AE Cress. Cohesive cancer invasion of the biophysical barrier of smooth muscle. *Cancer Metastasis Reviews*. [Epub January 2021]. PMID: 33398621. 2021.

562. Mitra S, Y Epshtein, S Sammani, H Quijada, W Chen, M Bandela, AA Desai, **JGN Garcia,** JR Jacobson. UCHL1, a deubiquitinating enzyme, regulates lung endothelial cell permeability *in vitro* and *in vivo*. *American J Physiology: Lung Cellular and Molecular Physiology*. [Epub January 2021]. 320(4):L497-L507. PMID: 33438509. 2021.

563. Oldham WM, AR Hemnes, MA Aldred, J Barnard, J Brandsma, EL Brittain, SY Chan, F Cheng, MH Cho, AA Desai, A Fattaey, **JGN Garcia,** MW Geraci, SD Ghiassian, KT Hall, EM Horn, W Huang, M Jain, RS Kelly, A Krishnamurthy, J Leopold, S Lindstroem, BD Modena, WC Nichols, C Rhodes, W Sun, A Sweatt, R Vanderpool, MR Wilkins, B Wilmot, RT Zamanian, JP Fessel, NR Aggarwal, J Loscalzo, L Xiao. Redefining pulmonary vascular disease phenotypes to illuminate disease mechanisms and to improve patient care: A joint NHLBI-Cardiovascular Medical Research and Education Fund workshop report. *J American College of Cardiology*. [Epub March 2021]. 77(16):2040-2052. PMID: 33888254. 2021.

564. Sun X, Sun B, Dudek SM, Camp S, **Garcia JG**. Genetic and epigenetic regulation of non-muscle myosin light chain kinase nmMLCK by lung inflammatory disease-associated variants. *Clinical Medicine*. [Epub April 2021]. 135(7):963-977. PMID: 33792658. 2021.

565. Liu P, M Dodson, H Li, CJ Schmidlin, A Shakya, Y Wei, **Garcia JGN,** E Chapman, PKiela, Q Zhang, X Ding, E White, A Ooi, DD Zhang. Non-canonical NRF2 activation promotes a pro-diabetic shift in hepatic glucose metabolism. *Molecular Metabolism*. [Epub April 2021]. PMID: 33933676. 2021.

566. Popova IA, Lubbe L, Petukhov PA, Kalantarov GF, Trakht IN, Chernykh ER, Leplina OY, Lyubimov AV, **Garcia JGN,** Dudek SM, Sturrock ED, Danilov SM. Epitope mapping of novel mAbs to human ACE. *Protein Science*. [Epub April 2021]. PMID: 33931897. 2021.

567. Du M, **JGN Garcia,** JD Christie, MM Wurfel, J Xin, NJ Meyer, M Gonzalez-Garay, Z Zhu, Q Yuan, Z Zhang, Y Wei, L Su, S Shen, X Dong, JN Hutchinson, P Tejera-Alvarez, M Wang, F Chen, DC Christiani. Integrative omics provides biologic and clinical insights into associated acute respiratory distress syndrome. *Intensive Care Medicine*. [Epub May 2021]. PMID: 34032881. 2021.

568. Vukmirovic M, X Yan, KF Gibson, M Gulati, JC Schupp, G DeIuliis, Taylor S. Adams1, Buqu Hu1, Antun Mihaljinec1, T Woolard1, H Lynn, N Emeagwali, EL Herzog, ES Chen, A Morris, JK Leader, Y Zhang, **JGN Garcia,** LA Maier, R Colman, WP Drake, M Becich, H Hochheiser, SR Wisniewski, PV Benos, DR Moller, A Prasse, LL Koth, N Kaminski. Transcriptomics of bronchoalveolar lavage cells identifies new molecular endotypes of sarcoidosis. *European Respiratory J*. [Epub June 2021]. PMID: 34083402. 2021.

569. Garcia AN, NG Casanova, DG Valera, X Sun, JH Song, CL Kempf, L Moreno-Vinasco, K Burns, T Bermudez, M Valdez, G Cuellar, T Gregory, RC Oita, V Reyes Hernon, C Barber, SM Camp, D Martin, Z Liu, C Bime, S Sammani, AE Cress, **JGN Garcia.** Involvement of eNAMPT/TLR4 signaling in murine radiation pneumonitis: protection by eNAMPT neutralization. *Translational Research*. [Epub June 2021]. PMID: 34139379. 2021.

570. Rodriguez M, J Chen, PP Jain, A Babicheva, M Xiong, J Li, N Lai, T Zhao, M Hernandez, A Balistrieri, S Parmisano, T Simonson, E Breen, D Valdez-Jasso, PA Thistlethwaite, John Y.-J. Shyy, Jian Wang, **JGN Garcia,** A Makino, JX.-J Yuan. Upregulation of calcium homeostasis modulators in contractile-

to-proliferative phenotypical transition of pulmonary arterial smooth muscle cells. *Frontiers in Physiology.* [Epub August 2021]. PMID: 34408668. 2021.

571. Hernández-Beeftink T, B Guillen-Guio, H Rodríguez-Pérez, I Marcelino-Rodríguez, JM Lorenzo-Salazar, A Corrales, M Prieto-González, A Rodríguez-Pérez, D Carriedo, J Blanco, A Ambrós, E González-Higueras, N Casanova, M González-Garay, E Espinosa, A Muriel, D Domínguez, AG de Lorenzo, JM Añón, J Belda, **JGN Garcia,** J Villar, C Flores and the Genetics of Sepsis (GEN-SEP) Network. Whole blood mitochondrial DNA copies associate with the prognosis of the acute respiratory distress syndrome after sepsis. *Frontiers in Immunology.* [Epub August 2021]. PMID: 34557198. 2021.

572. Fu P, Jacobson JR, Cress AE, **Garcia JG,** and Natarajan V. Role of paxillin and paxillin tyrosine phosphorylation in LPS-induced mitochondrial reactive oxygen species generation, mitochondrial dynamics and permeability changes in lung microvascular endothelial cells. *Scientific Reports.* [Epub September 2021]. PMID: 34475475. 2021.

573. Liao SY; Casanova N, Bime C, Camp S, Lynn H; **Garcia JGN.** Identification of early and intermediate biomarkers for ARDS mortality by multi-omic approaches. *Scientific Reports.* [Epub September 2021]. PMID: 34556700. 2021.

574. Vanderpool, RR, K Hunter, M Insel, **JGN Garcia,** EJ Bedrick, RJ Tedford, FP Rischard, Tedford, Ryan. The right ventricular-pulmonary arterial coupling and diastolic function response to therapy in pulmonary arterial hypertension. *Chest.* [Epub October 2021]. PMID: 34637777. 2021.

575. Mascarenhas JB, Arce F, Younger S, Mayfield R, Novak S, Gregorio CC, Dudek SM, **Garcia JG.** Novel role of the focal adhesion protein, Ena Vas-like protein, in vascular permeability regulation via cytoskeletal protein regulation. *Pulmonary Circulation.* [Epub October 2021]. PMID: 34631011. 2021.

576. Wang Z, P Jain, M Rodriguez, R Ayon, K Ravellette, L Wu, F Balistrieri, H Tang, X Wu, J Chen, T Zhao, S Black, A Desai, **JGN Garcia,** X Sun, J Shyy, D Valdez-Jasso, P Thistlethwaite, A Makino, J Wang, and J Yuan. Endothelial upregulation of mechanosensitive channel Piezo1 in pulmonary hypertension. *American J Physiology: Cell Physiology.* [Epub October 2021]. PMID: 34669509. 2021.

577. Jain P, N Lai, M Xiong, J Chen, A Babicheva, T Zhao, A Balistrieri, N Kim, D Valdez-Jasso, P Thistlethwaite, J Shyy, J Wang, **JGN Garcia,** A Makino, J Yuan. TRPC6, a therapeutic target for Pulmonary Hypertension. *American J Physiology: Lung Cell Molecular Physiology.* [Epub October 2021]. PMID: 34704831. 2021.

578. Ahmed, M, Sun X, BL Sun, A Babicheva, R Vanderpool, RC Oita, N Casanova, H Tang, A Gupta, G Gupta, F Rischard, S Sammani, CL Kempf, L Moreno-Vinasco, SM Camp, J Wang, AA Desai, JXJ Yuan, **JGN Garcia.** Endothelial eNAMPT drives EndMT and preclinical PH: Rescue by an eNAMPT-neutralizing mAb. *Pulmonary Circulation.* [Epub October 2021]. PMID: 34790349. 2021.

579. Bandela M, E Letsiou, V Natarajan, LB Ware, **JGN Garcia,** S Singla, SM Dudek. Cortactin modulates lung endothelial apoptosis induced by cigarette smoke. *Cells.* [Epub October 2021]. 10(11):2869. PMID: 34831092. 2021.

580. Kariotis S, E Jammeh, EM Swietlik, JA Pickworth, CJ Rhodes, P Otero, J Wharton, J Iremonger, MJ Dunning, D Pandya, TS Mascarenhas, N Errington, AA Thompson, CE Romanoski, F Rischard, **JGN Garcia**, JX-J Yuan, THS An, AA Desai, G Coghlan, J Lordan, P Corris, LS Howard, RA Condliffe, DG Kiely, C Church, J Pepke-Zaba, M Toshner, S Wort, S Gräf, NW Morrell, MR Wilkins, A Lawrie, D Wang. Biological heterogeneity in idiopathic pulmonary arterial hypertension identified through

unsupervised transcriptomic profiling of whole blood. *Nature Communications*. [Epub November 2021]. 12(1):7104. PMID: 34876579. 2021.

581. Sun BL, L Tang, X Sun, AN Garcia, SM Camp, Posadas, Anne E Cress, **JGN Garcia.** A humanized monoclonal antibody targeting extracellular nicotinamide phosphoribosyltransferase prevents aggressive prostate cancer progression. *Pharmaceuticals*. [Epub December 2021]. 14, 1322. PMID 34959723. 2021.

582. Wang L, E Letsiou, H Wang, P Belvitch, LN Meliton, ME Brown, M Bandela, J Chen, **JGN Garcia**, SM Dudek. MRSA-induced endothelial permeability and acute lung injury are attenuated by FTY720 S-phosphonate. *American J Physiology: Lung Cell Molecular Physiology*. [Epub January 2022]. 322(1):L149-L161PMID: 35015568. 2022.

583. Bermudez T, S Sammani, Song JH, V Reyes Hernon, Kempf C, AN Garcia, JK Burt, Hufford M, SM Camp, AE Cress, Desai AA, K Burns, Natarajan V, Jacobson JR, Dudek SM, Cancio L, Alvarez J, Rafikov R, Li Y, Zhang DD, Casanova N, C Bime, **JGN Garcia.** eNAMPT neutralization reduces preclinical ARDS severity via rectified NFkB and Akt/mTORC2 signaling. *Scientific Report*. [Epub January 2022]. PMID: 35027578. 2022.

584. Garcia AN, NG Casanova, CL Kempf, T Bermudez, DG Valera, JH Song, X Sun, H Cai, L Moreno-Vinasco, T Gregory, RC Oita, V Reyes Hernon, SM Camp, C Rogers, E Kybwa, N Menon, J Axtelle, J Rappaport, C Bime, S Sammani, AE Cress, **JGN Garcia.** eNAMPT is a novel DAMP that contributes to the severity of radiation-induced lung fibrosis. *American J Respiratory Cell Molecular Biology*. [Epub May 2022]. PMID: 35167418. 2022.

585. Chen W, JMC Gard, Y Epshtein, S Camp, **JGN Garcia,** JR Jacobson, AE Cress. Integrin Beta 4E (ITGB4E) promotes endothelial phenotypic changes and attenuates lung endothelial cell inflammatory responses. *Frontiers in Physiology*. [Epub February 2022]. PMID: 35250607. 2022.

586. Belvitch P, Casanova N, Sun X, Camp SM, S Sammani, Brown ME, Mascarhenas J, Lynn H, Adyshev D, Siegler J, Desai A, Seyed-Saadat L, Rizzo A, Bime C, Shekhawat GS, Dravid VP, Reilly JP, Jones TK, Feng R, Letsiou E, Meyer NJ, Ellis N, **Garcia JGN**, Dudek SM. A cortactin *CTTN* coding SNP contributes to increased lung vascular permeability and inflammatory disease severity in African descent subjects. *Translational Research*. [Epub February 2022]. PMID: 35181549. 2022.

587. Badagliacca R, Rischard F, Guidice FL, Howard L, Papa S, Valli G, Manzi G, Sciomer S, Palange P, **Garcia JGN,** Vanderpool R, Rinaldo R, Vigo B, Insel M, Fedele F, Vizza CD. Incremental value of cardiopulmonary exercise testing in intermediate-risk pulmonary arterial hypertension. *J Heart and Lung Transplantation*. [Epub March 2022]. PMID: 35414469. 2022.

588. Rafikov R, M Zemskova, M Vasilyev, J X-J Yuan, F Rischard, AA Desai, **JGN Garcia**, O Rafikova. Cytokine profiling in pulmonary arterial hypertension: the role of redox homeostasis and gender. *Translational Research*. [Epub April 2022]. PMID: 35405322. 2022.

589. Kempf CL, Sammani S, T Bermudez, Song JH, V Reyes Hernon, M Hufford, SM Camp, Burt J, Dudek SM, **Garcia JG.** Critical role for lung endothelial cell myosin light chain kinase isoform in the severity of inflammatory murine lung injury. *Pulmonary Circulation*. [Epub April 2022]. PMID: 35514774. 2022.

590. Vanderpool RR, KS Hunter, M Insel, **JGN Garcia,** EJ Bedrick, RJ Tedford, FP Rischard. The right ventricular-pulmonary arterial coupling and diastolic function response to therapy in pulmonary arterial hypertension. *Chest*. 161(4):1048-1059. PMID: 34637777. 2022.

591. Bandela M, P Belvitch, **JGN Garcia,** SM Dudek. Cortactin in lung cell function and disease. *International Journal of Molecular Sciences.* [Epub April 2022]. PMID: 35562995. 2022.

592. Bime C, NG Casanova, SM Camp, RC Oita, J Ndukum, V Reyes Hernon, DK Oh, Y Li, PJ Greer, DC Whitcomb, GI Papachristou, **JGN Garcia.** Circulating eNAMPT as a diagnostic biomarker in the critically ill: acute pancreatitis, sepsis, trauma, and Acute Respiratory Distress Syndrome. *BMC Anesthesiology.* PMID: 35705899. 2022.

593. Mascarenhas JB, JH Song, AA Gaber, JR Jacobson, AE Cress, SM Camp, SM Dudek, **JGN Garcia.** An actin-, cortactin- and Ena-VASP-linked complex contributes to endothelial focal adhesion and vascular barrier regulation. *Cellular Physiology and Biochemistry.* 20;56(4):329-339. PMID: 35856787. 2022.

594. Bhattacharya J, R Booy , A Casadevall, C Dela Cruz, DS Fedson, **JGN Garcia ,** G Grohmann, IFN Hung, JR Jacobson, LC Jennings, L Kobzik, A Leligdowicz, JK Liao, JH Martin, DM Musher, CN Serhan, M Tashiro. A practical treatment for COVID-19 and the next pandemic. *Pharmacol Res Perspective.* PMID: 35837790. 2022

595. Sammani S, T Bermudez, CL Kempf, JH Song, JC Fleming, V Reyes Hernon, M Hufford, L Tang, L Cai, SM Camp, V Natarajan, JR Jacobson, SM Dudek, B Sun, NG Casanova, C Bime, **JGN Garcia**. eNAMPT neutralization preserves lung fluid balance and reduces acute renal injury in porcine sepsis/VILI-induced inflammatory lung injury. *Frontiers in Physiology.*13:916159. PMID: 35812318. 2022.

596. Hemnes AR, JA Leopold, MK Radeva, GJ Beck, A Abidov, MA Aldred, J Barnard, EB Rosenzweig, BA Borlaug, WK Chung, SAA Comhair, AA Desai, HM Dubrock, SC Erzurum, JE Finet, RP Frantz, **JGN Garcia,** MW Geraci, MP Gray, G Grunig, PM Hassoun, KB Highland, NS Hill, B Hu, DH Kwon, MS Jacob, CL Jellis, AB Larive, JK Lempel, BA Maron, SC Mathai, K McCarthy, R Mehra, R Nawabit, JH Hewman, MA Olman, MM Park, JA Ramos, RD Renapukar, FP Rischard, SG Sherer, WHW Tang, JD Thomas, RR Vanderpool, AB Waxman, JD Wilcox, JX-J Yuan, EM Horn, and the PVDOMICS Study Group. Clinical Characteristics of PVDOMICS Participants: Observations across the spectrum of pulmonary vascular disease. *J American College of Cardiology.* 80:697–718. PMID: 35953136. 2022

597. Danilov SM, Kurilova OV, Sinitsyn VE, Kamalov AA, **Garcia JGN**, Dudek SM. Predictive potential of ACE phenotyping in extrapulmonary sarcoidosis. *Respiratory Research.* 23(1):211. PMID: 35996109. 2022

598. Song JH, JB Mascarenhas, S Sammani, CL Kempf, H Cai, SM Camp, T Bermudez, V Natarajan, **JGN Garcia.** TLR4-induced inflammatory vascular permeability via Dock1 targeting and NOX4 upregulation. *Biochim Biophys Acta: Molecular Basis of Disease.* [Epub September 2022]. PMID: 36179995. 2022.

599. Casanova NG, V Reyes-Hernon, T Bermudez, MK Hufford, T Gonzales, RC Oita, SM Camp; G Hernandez, J Rojas Serrano, B Sun, J Fimbres, M Mirsaeidi, S Sammani, C Bime, **JGN Garcia**. Biochemical and genomic identification of novel biomarkers in progressive sarcoidosis: HBEGF, eNAMPT and ANG2. *Frontiers in Medicine.* [Epub October 2022]. PMID: 36388923. 2022.

600. Dodson M, Shakya A, Anandhan A, Chen J, **Garcia JGN**, Zhang DD. NRF2 and Diabetes: The Good, the Bad, and the Complex. *Diabetes.* 71(12):2463-2476. PMID: 36409792. 2022

601. Moreira A, M Tovar, AM Smith, GC Lee, JA Meunier, Z Cheema, A Moreira, C Winter, S Mustafa, S Seidner, **JGN Garcia,** B Thébaud, P Kwinta, SK Ahuja. Development of a peripheral blood

transcriptomic gene signature to predict bronchopulmonary dysplasia. *American J Physiology: Lung Cell Molecular Physiology*. [Epub December 2022]. PMID: 36472344. 2022.

602. Liu P, Anandhan A, Chen J, Shakya A, Dodson M, Ooi A, Chapman E, White E, **Garcia JG**, Zhang DD. Decreased autophagosome biogenesis, reduced NRF2, and enhanced ferroptotic cell death are underlying molecular mechanisms of non-alcoholic fatty liver disease. *Redox Biology*. 59:102570. [Epub December 2022]. PMID: 36495698. 2022.

603. Tumurkhuu G, Casanova NG, CL Kempf, DE Laguna, SM Camp, J Dagvadorj, J Song, VR Hernon, C Travelli, EN Montano, JM Yu, M Ishimori, DJ Wallace, Sammani S, C Jefferies, **JGN Garcia**. Activation of the eNAMPT/TLR4 inflammatory cascade is a key contributor to preclinical lupus vasculitis and alveolar hemorrhage. *J Autoimmunity*. [Epub December 2022]. (in press), 2023.

604. Anandhan A, M Dodson, A Shakya, P Liu, Y Wei, H Tan, Q Wang, Z Jiang, K Yang, **JGN Garcia,** SK Chambers, E Chapman, A Ooi, Y Yang-Hartwich, BR Stockwell, DD Zhang. NRF2 controls iron homeostasis and ferroptosis through HERC2 and VAMP8. *Science Advances*. [Epub December 2022]. (in press). 2023.

605. Sun BL, X Sun[2], CL Kempf, JH Song, NG Casanova, SM Camp, VR Hernon, M Fallon, C Bime, DR Martin, C Tavelli, DD Zhang, **JGN Garcia.** Involvement of eNAMPT/TLR4 Inflammatory signaling in progression of non-alcoholic fatty liver disease (NAFLD) to steatohepatitis and fibrosis. *FASEB*. (in revision). 2023.

606. Ahmed, M, NG Casanova, N Zaghloul, A Gupta, M Rodriquez, IR Richard, CL Kempf, X Sun, JH Song, VR Hernon, S Sammani, SM Camp, A Moreira, CD Hsu, **JGN Garcia.** Targeting the eNAMPT/TLR4 inflammatory cascade to reduce the severity of intra-uterine infection in pregnancy and improves infant outcomes. *Frontiers in Physiology* (in revision). 2023.

607. Lynn H, X Sun, N Casanova, C Bime, R Oita, N Ramos, DK Coletta, SM Camp, J Kanes, N Ellis, **JGN Garcia.** Linkage of *NAMPT* promoter variants to eNAMPT secretion, plasma eNAMPT levels and ARDS severity *Therapeutic Advances in Respiratory Research*. (submitted). 2023.

608. Casanova NG, ML Gonzalez-Garay, C Bime, X Sun, T Gonzales, CG Montgomery, Y Lussier, **JGN Garcia**. Novel eQTL polymorphisms contribute to the risk of progressive complicated sarcoidosis in European and Africa descent subjects. *Genomics Research* (submitted). 2023.

609. Kempf CL, JH Song, Sammani S, Tadeo Bermudez, V Reyes Hernon, L Tang, L Cai, SM Camp, C White, L Veress, **JGN Garcia**. Biologic neutralization of the novel DAMP, eNAMPT, attenuates sulfur mustard-induced inflammatory lung injury and fibrosis. *J Disaster Medicine Public Health*. (submitted). 2022.

610. Sweedo A, M Niemiec, L Breshears, YR Moiia, **JGN Garcia,** D Bluestein, J Sheriff, JG Purdy, SS Saavedra, MJ Slepian, FT Arce. Regional transformations of platelet stiffness induced by mechanostimulation. *Biophysical J* (in revision). 2023.

611. Gupta A, Morrisoe S, Gupta A, Tang H, Sangam, G Gupta, Sun Y, Larsen B, Rafikov R, Rafikova O, Nair VN, Mitra S, Mathew B, Yilmaz, S, Yuan JXY, Jacobson J, WC Nichols, **Garcia JGN,** Desai AA. Deficiency of the deubiquitinase UCHL1 attenuates pulmonary hypertension. *J Clinical Investigation*. (submitted), 2023.

612. Arora A, Batai K, Karnes J, Pauciulo M**, Garcia JG,** Yuan JX, Rischard F, Nichols W**,** Desai AA. Novel genetic associations in scleroderma-associated PAH. *Nature Genetics*. (submitted) 2023.

613. Karnes J, Yilmaz, S, Batai K, Arora A, Pauciulo M, **Garcia JG,** Rischard F, Yuan JX, Nichols W, Desai AA. Karnes JH, K Batai, A Arora, JB Kaye, HE Steiner, V Nair**, JGN Garcia,** JXJ Yuan, MW Pauciulo, WC Nichols, R Kittles, AA Desai. Variation in Sorting Nexin 29 (SNX29) and Acute Vasodilator Response in Pulmonary Arterial Hypertension: Genome-wide association of vasodilator response PAH. *Circulation.* (submitted), 2023.

614. Methé BA, K Li, M Becich, ES Chen, RG Colman, WP Drake, B Frank, **JGN Garcia,** KF Gibson, H Hochheiser, EL Herzog, LL Koth, JK Leader, LA Maier, DR Moller, S O'Neal, SR Wisniewski, Y Zhang, N Kaminski, E Ghedin, AM Morris. Microbiota and clinical variable associations in sarcoidosis. *European Respiratory J.* (submitted), 2023.

615. Sun X, S Sammani, M Hufford, Sun B, C Kempf, Camp S, **JGN Garcia,** Bime C**.** Targeting SELPLG-encoded P-selectin glycoprotein ligand 1 in Preclinical ARDS Models: Influence of ARDS Stimuli on *SELPLG* Promoter Regulation. *Pulmonary Circulation.* (submitted), 2023.

616. McGrath JE, JMC Gard, M Noon, RB Nagle, L Das, **JGN Garcia,** JR Jacobson, M Sorbellini, AE Cress. Characterization and induction of a novel α6β4 integrin isoform in normal endothelial and epithelial cells and epithelial cancer. *Cancers* (submitted). 2023.

617. Liu Z, C Barber, Sammani S, T Bermudez, SM Camp, V Reyes Herndon, CL Kempf, **JGN Garcia**, DR Martin. An eNAMPT-neutralizing mAb reduces post-infarct myocardial injury, fibrosis and ventricular dysfunction. *J America College Cardiology.* (submitted), 2023.

618. Casanova NG, RL De Armond, S Sammani, C Kempf, **JGN Garcia,** S Parthasarathy. Circadian disruption dysregulates gene expression associated to lung permeability and inflammation. *American J Respiratory Cell Molecular Biology.* (submitted), 2023.

619. Camp S, Gokhale V, M Khanna, Oitu R, **Garcia JGN.** *In silico* modeling and functional characterization of eNAMPT-TLR4 binding. *Proceeding of National Academy of Science.* (submitted), 2023.

620. Rodriguez M, Zinkeng Fuayagem A, RC Oita, CL Kempf, SM Camp, D Garcia, JB Mascarenhas, V Reyes Hernon, **JGN Garcia**. Mechanisms of extracellular eNAMPT secretion from human lung endothelium. *American J Respiratory Cell Molecular Biology.* (submitted), 2023.

621. Gulino K, A. Geber, M Badri, T Song, A Twaddle, H Hochheiser, RG Collman, Y Zhang, LA Maier, L Koth, M Rossman, KF Gibson, W. Drake, E Herzog, DR Moller, S Wisniewski, R.M. Senior, **JGN Garcia,** ES Chen, CB Strange, R Sandhaus, M Becich, N Kaminski, L Segal, BA Methe, AM Morris, E Ghedin. Characterization of viral profiles in complex lung diseases. *Pulmonary Circulation.* (submitted) 2023.

622. Sun X, Ma SF, Wade MS, Yates CR, Meduri G, Zhao Y, Natarajan V, Dudek SM, and **Garcia JG**. Polymorphisms in sphingosine 1-phosphate metabolism and signaling genes are associated with susceptibility to severe sepsis-induced acute respiratory distress syndrome: functional promoter analysis. *American J Respiratory Cell Molecular Biology.* (submitted), 2023.

623. Sun X, R Vanderpool, N Casanova, F Rischard, H Lynn, Karnes J, SM Camp, J Wang, JXJ Yuan, M Ahmed, AA Desai, **JGN Garcia.** Role of *NAMPT* promoter variants and plasma eNAMPT levels in right ventricular dysfunction in pulmonary hypertension. *European Respiratory J.* (in preparation), 2023.

624. Cress AE, Gard JMC, Jacobson JR, and **Garcia JG.** Novel CD104E expression and integrin heterodimer switching. *American J Respiratory Cell Molecular Biology.* (submitted). 2023.

625. Mosier JM, S Sammani, C Kempf, E Unger, **JGN Garcia**. The impact of intravenous dodecafluoropentane on a murine model of acute lung injury. *Intensive Care Medicine Experimental,* (submitted), 2023.

626. Wang T, Shioura K, **Garcia JG**. Particulate matter exacerbates congestive heart failure via exaggerated lung inflammation. *American J Respiratory Cell Molecular Biology*. (submitted), 2023.

627. Maloney JP, Fingerlin TE, Stansberry JB, Calabrese DW, Tripp-Addison ML, Chuckran A, Poch KR, Gao L, Barnes KC, **Garcia JG,** Abraham E, Nick JA. Alternate *NAMPT* promoters due to polymorphic retinoid-binding sites are associated with necrosis and TNF-a release in neutrophils. *Gene*. (in revision), 2023.

628. Bandela M, Avasthy S, Brown ME, Mustata G-M, **Garcia JG,** Shekhawat G, Dravid VP, and Dudek SM. A disease-associated SNP in cortactin impairs lung endothelial elastic properties. *Scientific Reports*. (in preparation). 2023.

629. Belvitch P, Demeritte R, Garcia JG, Letsiou E, and Dudek SM. CARMIL regulates lung endothelial peripheral cytoskeletal structure and permeability *Microvascular Research* (in preparation). 2023.

630. Song JH, Mascarenhas J, Xie L, Sammani S, Moreno-Vinasco L, Letsiou E, X Sun, Siegler J, Jacobson JR, Dudek SM, and **Garcia JG**. Excessive mechanical stress increases type 2 deiodinase expression in human lung endothelial cells. *Pulmonary Circulation*. (in preparation), 2023.

631. Song JH, Mascarenhas JB, Langlais P, and **Garcia JG.** Identification of nitration sites on myosin light chain kinase and role in nmMLCK enzymatic regulation. *American J Respiratory Cell Molecular Biology*. (in preparation). 2023.

632. Popova IA, Camp SM, Danilov SM, **Garcia JG.** Monoclonal antibody epitope mapping of non-muscle myosin light chain kinase (nmMLCK) to probe structure-function relationships. *J Cellular Biochemistry*. (in preparation). 2023.

BOOK EDITORSHIP/REVIEW

1. Linz-McGillem L, and **Garcia JGN**. Role of the Endothelial Cytoskeleton in Microvascular Function. In: *Microvascular Research: Biology and Pathology*, D Shepro, ed. Philadelphia, PA, Elsevier Science, pp. 247-254. 2006.

2. *Textbook of pulmonary vascular disease*. Yuan JXJ, **Garcia JGN**, Hales CA, Archer SL, Rich S, and West JB. In: Springer, New York. Ch pp 1 online resource (xxxii, 1658 p.). ISBN: 9780387874296 (electronic bk.). 2011.

3. *Urban Health: Combating Disparities With Local Data*. **Garcia JGN**, and Kazee N. A M S Edited by Steven Whitman, and Maureen R. Benjamins. In: Oxford University Press, New York, New York 2010. Review. American J Epidemiology. Ch pp 400. ISBN: 978-0-19-973119-0. 2012.

4. *Review of EPA's Integrated Risk Information System (IRIS) Process*. Samet JM, Bartell S, Bero L, Bostrom A, Dickersin K, Dorman DC, Eaton DL, **Garcia JG**, Hernan M, House JS, MacDownell MM, Scheines RP, Siegel LM, Wallace RB, and Zhu Y. In: *National Research Council of the National Academies*. The National Academies Press, Washington DC. Ch pp 170. ISBN: 978-0-309-30414-6. 2014.

BOOK CHAPTERS

1. Malik AB, Noonan TC, Selig WM, and **Garcia JGN**. Effects of exogenous leukotrienes on the pulmonary circulation. In: *Leukotrienes in Cardiovascular and Pulmonary Function*, Ad M. H. Gee Lefer, ed., Alan R. Liss Inc, pp. 221-235. 1985.

2. Malik AB, **Garcia JGN**, Lo SK, Cooper J, Perlman MB, and Johnson A. Mechanisms of lung vascular injury after thrombin. In: *Acute Lung Injury: Pathogenesis of Adult Respiratory Distress Syndrome*, A H H Kazemi, PJ Kadowitz, ed., PSG Publishing Co, pp. 145-165. 1986.

3. **Garcia JGN**, and Martin WJ. Lower respiratory tract defense mechanisms in health and disease. In: *Allergy: Principles and Practice*, R C Middleton E, Ellis EF, Adkinson NF, Yunginger JW, ed., CV Mosby, pp. 2-13. 1989.

4. **Garcia JGN**, and Stasek J. Bronchoalveolar lavage in the occupational lung disorders: Pathogenetic mechanisms and clinical utility. In: *Bronchoalveolar Lavage: Clinical Utility*, R Baughman, ed., PSG Publishing Co, pp. 444-449. 1991.

5. Kronenberg RS, Levin JL, Dodson RF, **Garcia JGN**, and Griffith DE. Asbestos-related disease in employees of a steel mill and a glass bottle manufacturing plant. In: *The Third Wave of Asbestos Disease: Exposure to Asbestos in the Work Place*, P J Landrigan, and H Kazemi, eds., Annals NY Acad Sci, pp. 397-403. 1991.

6. **Garcia JGN**, and Natarajan V. Mechanisms of transmembrane signal transduction and activation of phospholipases in vascular endothelium: Implications for lung inflammation. In: *Lung Vascular Injury: Molecular and Cellular Responses*, T Ferro, and A Johnson, eds. Bethesda, MD, Marcel Dekker, Inc, pp. 1-65. 1992.

7. **Garcia JGN**, Aschner J, and Malik AB. Regulation of thrombin-induced endothelial cell prostaglandin synthesis and barrier function. In: *Thrombin: Structure and Function*, L J Berliner, ed. New York, NY, Plenum Publishing Co., pp. 397-430. 1992.

8. Melius J, Steele G, Faroon O, Sanderson L, Anderson H, Brender J, Canter D, Colborn T, **Garcia JGN**, Hamilton S, Lucier G, and Singal M. Public Health Implications of Human Exposure to Polychlorinated Biphenyls (PCBs). In: *US Department of Health and Human Services; Agency for Toxic Substances and Disease Registry*, pp. 1-365. 1994.

9. **Garcia JGN**, and Gilbert-McClain LI. Regulation of myosin phosphorylation and barrier function in endothelium. In: *Pulmonary Edema*, E K Weir, and J T Reeves, eds. Armonk, New York, Futura Publishing Co., pp. 261-273. 1998.

10. Csortos C, Lazar V, and **Garcia JGN**. PCR screening of cDNA library to identify novel genes. In: *Molecular Biology of Vascular Disease: Methods in Molecular Medicine*, A H Baker, ed., Humana Press Inc., pp. 1-31. 1999.

11. Jacobs KN, Petrache I, and **Garcia JGN**. In vitro regulation of leukocyte diapedesis by the endothelial cell contractile apparatus. In: *Interactions between Blood Elements and the Endothelium*, E K Weir, H L Reeves, and J T Reeves, eds. Armonk, New York, Futura Publishing Co. Inc., pp. 277-289. 2002.

12. Zaiman AL, Dudek SM, Natarajan V, and **Garcia JGN**. Role of tyrosine phosphorylation in reactive oxygen species-mediated vascular endothelial cell barrier dysfunction. In: *Etiology and Treatment of Acute*

Lung Injury: From Bench to Bedside, S Matalon, and N Matalon, eds. Amsterdam, Berlin, Oxford, Tokyo, Washington, DC, IOS Press BV, pp. 160-168. 2002.

13. Ma SF, Ye SQ, and **Garcia JGN**. Gene expression profiling in pulmonary and systemic vascular cells exposed to biomechanical stimuli. In: *Cardiovascular Proteomics and Genomics*, D Dunn, and J Van Eyk, eds. Weinheim, Germany, Life Sciences, Wiley-VCH Verglag GmbH, pp. 86-98. 2002.

14. Jacobson JR, and **Garcia JGN**. Bronchoalveolar lavage. In: *Flexible Bronchoscopies, Second Edition*, K P Wang, A Mehta, and J F Turner, eds. Berlin, Boston, Copenhagen, Edinburgh, Iowa, London, Melbourne Oxford, Paris, Tokyo, Vienna, Blackwell Science, Inc., pp. 22-43. 2002.

15. Tom SM, and **Garcia JGN**. Pulmonary artery catheters and intraaortic balloon pumps. In: *The Osler Medical Handbook*, C Cheng, and A Zaas, eds. Philadelphia, Mosby, an affiliate of Elsevier Science, pp. 281-291. 2003.

16. Jacobson JR, and **Garcia JGN**. Pulmonary vascular barrier regulation by thrombin and Edg receptors. In: *Cell Signaling in Vascular Inflammation*, J Bhattacharya, ed. Totowa, NJ, Humana Press Inc., pp. 235-251. 2005.

17. Jacobson JR, Dudek SM, and **Garcia JGN**. Differential regulation of endothelial cell barrier function. In: *Endothelial Cell Phenotypes in Health and Disease*, W C Aird, ed. New York, NY, Marcel Dekker, Inc., pp. 217-228. 2005.

18. McVerry BJ, Dudek SM, Mehta D, and **Garcia JGN**. Calcium channels, calcium signaling and lung vascular barrier regulation. In: *Ion channels in the pulmonary vasculature*, J X-J Yuan, ed. New York, Taylor and Francis Group, LLC., pp. 463-481. 2005.

19. **Garcia JGN**, and Malik AB. Pulmonary circulation and regulation of fluid balance. In: *Textbook of Respiratory Medicine*, J Murray, and J Nadel, eds. Philadelphia, Elsevier Science, pp. 1288-1332. 2005.

20. Nonas S, Petrache I, and **Garcia JGN**. Cigarette Smoke, Emphysema and Lung Endothelium. In: *Textbook of Chronic Obstructive Pulmonary Disease*, R Stockley, S Rennard, K Rabe, and B Celli, eds. Malden, MA, Blackwell Publishing Ltd., pp. 300-308. 2005a.

21. Nonas S, Jacobson JR, and **Garcia JGN**. Genomic Insights into Ventilator-Induced Lung Injury. In: *Ventilator-Induced Lung Injury*, R Hubmayr, G Saumon, and D Dreyfus, eds. New York, NY, Taylor and Francis, LLC., pp. 403-430. 2005b.

22. **Garcia JGN**, and Taylor R. New directions in the diagnosis and treatment of severe sepsis. In: *Eli Lilly Co. Sponsored Monograph*, pp. 1-45. 2005.

23. Linz-McGillem L, and **Garcia JGN**. Role of the Endothelial Cytoskeleton in Microvascular Function. In: *Microvascular Research: Biology and Pathology*, D Shepro, ed. Philadelphia, PA, Elsevier Science, pp. 247-254. 2006a.

24. Linz-McGillem L, and **Garcia JGN**. Cytoskeletal regulation of blood retinal barrier permeability. In: *Current Drug Targets – Cardiovascular and Hematological Disorders*, pp. 142-155. 2006b.

25. Moreno L, Dudek SM, and **Garcia JGN**. Sphingolipids and Lung Vascular Barrier Regulation. In: *Sphingolipid Biology*, Y Hirabayashi, Y Igarashi, and A Merrill, eds. Tokyo, pp. 403-414. 2006.

26. Ma SF, Nonas S, Gregoryev D, Moitra J, Ye SQ, and **Garcia JGN**. Pulmonary Endothelium as Clinical targets in Acute Lung Injury: Genomic Insights. In: *Lung Endothelial Cell Heterogeneity*, T Stevens, ed. Armonk, NY, Futura Publishing Company Inc., pp. 482-496. 2006.

27. **Garcia JGN**. Regulation of Endothelial Barrier Responses and Permeability.Cytoskeletal and Microvascular Permeability. In: *Endothelial Cell Phenotypes in Health and Disease*, W C Aird, ed. Garcia, J. (2007). Endothelial Biomedicine(pp. 1015-1029). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511546198.114 Cambridge, Cambridge University Press. 2007.

28. Wolfson RK, Lang G, Jacobson J, and **Garcia JGN**. Therapeutic strategies to limit lung endothelial cell permeability. In: *Pulmonary Endothelium: Function in Health and Disease*, S Round, and N F Voelkel, eds. Hoboken, NJ, John Wiley & Sons, Ltd., pp. 337-354. 2009.

29. Mitra S, Turner-Lloveras D, Ma SF, and **Garcia JGN**. Genetic Insights into Lung Barrier Regulation in Inflammatory Lung Disease. In: *Pulmonary Endothelium: Function in Health and Disease*, S Round, and N F Voelkel, eds. Hoboken, NJ, John Wiley & Sons, Ltd., pp. 399-415. 2009.

30. Lang GD, Chiang ET, and **Garcia JGN**. Lung Vascular Dysfunction and Repair in Acute Lung Injury: Role of the Endothelial Cytoskeleton. In: *Acute Respiratory Distress Syndrome- 2nd Edition*, A Choi, ed. New York, NY, Informa Healthcare, Inc., pp. 262-286. 2009.

31. Jacobson JR, and **Garcia JGN**. Pulmonary circulation and regulation of fluid balance. In: *Textbook of Respiratory Medicine*, J Murray, and J Nadel, eds. Philadelphia, PA, Elsevier Science. pp. 92-109. 2010.

32. Moreno L, and **Garcia JGN**. Receptor Tyrosine Kinase Inhibitors in Rodent Pulmonary Hypertension. In: *Membrane Receptors, Channels, and Transporters in Pulmonary Circulation*, J X-J Yuan, and J P T Ward, eds. Totowa, NJ, Humana Press Inc., pp. 419-434. 2010.

33. Machado RF, and **Garcia JGN**. Genetics of Acute Lung Injury and Vascular Barrier Dysfunction. In: *Textbook of Pulmonary Vascular Disease*, J X-J Yuan, J G Garcia, C A Hales, S L Archer, S Rich, and J B West, eds. New York, NY, Springer, pp. 899-912. 2011.

34. Chiang ET, Wang T, and **Garcia JGN**. Acute Lung Injury: The Injured Lung Endothelium, Therapeutic Strategies for Barrier Protection and Vascular Biomarkers. In: *Textbook of Pulmonary Vascular Disease*, J X-J Yuan, J G Garcia, C A Hales, S L Archer, S Rich, and J B West, eds. New York, NY, Springer, pp. 197-221. 2011.

35. Machado RF, Kawkitinarong K, and **Garcia JGN**. Genetics of Acute Lung Injury. In: *American Physiologic Society Handbook of Pulmonary Circulation and Non-Respiratory Functions*, I F McMurtry, W W Wagner, T Stevens, and M N Gillespie, eds. Hoboken, NJ, John Wiley & Sons, Ltd. 2011 (in press). ?

36. Sweiss NJ, Patterson K, Sawaqed R, Jabbar J, Korsten P, Hogarth K, **Garcia JGN**, Niewold TB, and Baughman RB. Rheumatologic Manifestations of Sarcoidosis. In, R B Baughman, ed. Totowa, NJ, Humana Press Inc. pp. 463-473. 2010

37. Garcia AN, and **Garcia JGN**. Methods to assess vascular during angiogenic processes. In: *The Textbook of Angiogenesis and Lymphangiogenesis: Methods and Applications* USA, Springer, Inc., pp. 69-83. 2012.

38. Shen K, Wang T, and **Garcia JGN**. MYLK (myosin light chain kinase). In: *Atlas of Genetics and Cytogenetics in Oncology and Haematology*, J-L Huret, ed., INIST-CNRS, pp. 901-908. 2012.

39. Abbasi T, and **Garcia JG**. Sphingolipids in lung endothelial biology and regulation of vascular integrity. In: *Handbook Exp Pharmacol*, E Gulbins, and I Petrache, eds., Springer Vienna, pp. 201-226. 2013.

40. Barry A, Infusino G, Quijada H, and **Garcia JGN**. Structure and regulation of the endothelial cell cytoskeleton. In. 2013.

41. **Garcia JGN**. Pulmonary circulation and regulation of fluid balance. In: *Textbook of Respiratory Medicine*, J Murray, and J Nadel, eds. Philadelphia, PA, Elsevier Science. 2015 pp. 119-154.

42. Casanova N, Navarrete J, Quijada H, Hecker L, and **Garcia JGN**. Health Care Disparities In ARDS. In: *Health Disparities in Respiratory Disease*, L B Gerald, and C Berry, eds. New York, Springer Wein. 2016 pp. 135-146.

43. Casanova NG, T Wang, **JGN Garcia.** Genomics, Epigenetics and Precision Medicine in Integrative Preventive Medicine. Richard Carmona MD and Mark Liponis (eds)Editor. New York, Springer Weil Integrative Medicine Library (New York 2017; online Oxford Academic. 2016. pp. 49-73

CURRENT GRANTS - PRINCIPAL INVESTIGATOR

R-01- HL158631 "Role of endothelial cell eNAMPT secretion and TLR4 signaling in the ARDS Vascular Endotype." National Heart, Lung and Blood Institute (NHLBI) 5/01/2022 – 3/30/2027 $500,000/yr DC. Total DC $3,800,000. **Score 20, 2.0 percentile**. **NOGA May 2022. Relinquished in favor of P-01 HL126609.**
PI: Joe G.N. Garcia, MD.

P-01- HL134610-01. PPG "Genetics, Epigenetics, And Post-Translational Modifications In The Development of Ventilator-Induced Lung Injury (VILI)." National Heart, Lung and Blood Institute (NHLBI). 1/30/2017-2/1/2023. Total Direct Costs: $8,307, 207. Total Costs $11,715,253. Program Director/PI- Steve Black PhD, Joe G.N. Garcia, MD Co-Director.

- **Project #2:** Critical role of NAMPT and Toll-Like Receptor 4 in mechanical ventilation-induced lung inflammation and injury (VILI). Project Leader: Joe G.N. Garcia, MD.
- **Core B:** Molecular Biology and Genetics Core. Core Leader: Joe G. N. Garcia, MD

R-42 HL152888 STTR- "eNamptorTM A Humanized mAb To Reduce the Severity of Radiation Pneumonitis and Fibrosis" NIH/NHLBI- Aqualung Therapeutics, Corp. 04/2020 - 05/2023 Total DC $3,400,000.
PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R-01- HL141387 "Novel Involvement of NAMPT and TLR4 in PAH Vascular Remodeling."
NIH/NHLBI 12/01/2018 – 11/31/2023 $300,000/yr DC. Total DC $2,400,000.
PI: Joe G.N. Garcia, MD.

R-25-HL126140-01 AZ Programs to Increase Diversity Among Individuals Engaged in Health-Related Research (PRIDE): "Advanced Health Disparities Training Program in Heart, Lung, Blood, And Sleep Conditions". NHLBI, 09/15/2014-12/31/2024. Total Direct Costs: $1,233,303. Total Costs: $1,331,967.
Multiple PIs: Joe G.N. Garcia, MD, Francisco A. Moreno, MD; Sai Parthasarathy MD.

U-01-HL125208-01 Phenomic and Genomic Study to Subphenotype Hispanics with Pulmonary Hypertension, NHLBI 09/15/2014-7/31/2024. Total Direct Costs: $950,000. Total Costs: $1,456,042.
Multiple-PIs: Franz P. Rischard, DO & Joe G.N. Garcia, MD.

R-44 HL164685-01 "Phase 2A Clinical Trial of an eNAMPT-Neutralizing mAb, ALT-100, in ARDS" National Heart, Lung and Blood Institute (NHLBI) 12/01/2022 - 11/30/2024 via Aqualung Therapeutics Corp. $3,000,000 DC. **July review: Score 20, NOGA expected November, 2022.**

PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R-42- HL164300 STTR- "Preclinical Development of a Novel eNAMPT-Neutralizing mAb for Pulmonary Hypertension" National Heart, Lung and Blood Institute (NHLBI) 9/01/2022 - 8/30/2025 via Aqualung Therapeutics Corp. Total DC $2,600,000. **NOGA received September, 2022.**
PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R-42-HL145930 STTR- "Novel Therapeutic Antibody Targeting of Extracellular NAMPT in Inflammatory Bowel Disease (IBD)" 9/2022–8/2025 NHLBI via Aqualung Therapeutics, Corp. Total DC $2,600,000. **NOGA received September, 2022.**
PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R-01- HL162722-01 "Regulation of Sepsis/ARDS-induced Vascular Permeability by Non-muscle Myosin Light Chain Kinase and Cortactin." National Heart, Lung and Blood Institute (NHLBI) 4/01/2022 – 3/30/2026 $485,000/yr DC. Total Cost $3,687,000. **Score 26, 11 percentile. Grant relinquished in favor of P-01 HL126609.**
PI: Joe G.N. Garcia, MD.

R-01- HL162722-01 "Crosstalk between S1P Receptors and P-Selectin in Regulation of Inflammatory Vascular Permeability" National Heart, Lung and Blood Institute (NHLBI) 10/01/2022 – 6/30/2026 $495,000/yr DC. Total Cost $3,687,000. **Score 20, 4 percentile. Grant relinquished in favor of P-01 HL126609.**
MPI: Joe G.N. Garcia, MD., Steven Dudek MD, Christian Bime MD.

P-01 HL126609- PPG "Cytoskeletal Regulation of Lung Endothelial Pathobiology in ARDS." National Heart, Lung and Blood Institute (NHLBI). 9/1/2022-8/30/2027. Total Direct Costs: $8,307,207. Total Costs $11,724,382. Program Director/PI- Joe G.N. Garcia, MD. **Score 1-10% percentile. NOGA received September, 2022.**

- Project #1: Non-muscle Myosin Light Chain Kinase and Cortactin Regulate Peripheral EC Cytoskeletal Remodeling, Gap Closure and Barrier Restoration. Project Leader: Joe G.N. Garcia, MD.
- Project #2: EC eNAMPT secretion and eNAMPT/TLR4 signaling in the ARDS Vascular Endotype. Project Leader: Joe G.N. Garcia, MD.
- Project #4: Crosstalk between S1P Receptors and P-Selectin in Inflammatory Vascular Permeability. Co-Investigator: Joe G.N. Garcia, MD.
- Core A Administrative Core: Core Leader: Joe G. N. Garcia, MD.

CURRENT GRANTS – CO-INVESTIGATOR (or subcontracts).

R41- HL254691- A0 STTR- "Targeting the P Selectin Pathway to Improve ARDS Survival". 4/1/2022 - 3/30/2023. National Heart, Lung and Blood Institute (NHLBI) via Aqualung Therapeutics Corp. $260, 000 DC. **November review: Score 32. NOGA received September, 2022.**
PI: Stan Miele, Chief Business Officer , Aqualung Therapeutics Corp.
Co-I Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R-01- HL254691- A1 "Targeting the P Selectin Pathway to Improve ARDS Survival". 9/1/2022 - 8/30/2027. National Heart, Lung and Blood Institute (NHLBI) via Aqualung Therapeutics Corp. $260, 000 DC. PI: Christian Bime MD. Co-I Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

PENDING GRANTS – PRINCIPAL INVESTIGATOR

U-01- AI170042- "Therapeutic targeting of eNAMPT to attenuate ionizing radiation-induced inflammation, fibrosis and multi-organ injury". National Institute Environmenal Sciences (NIEHS). 6/1/2022- 5/31/2025. Total Direct Costs: $1,407,207.
PI- Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R-41- DK131709- A1 STTR- "A biologic mAb to DAMPen eNAMPT/TLR4 Signaling to slow NASH progression". 4/1/2023 - 3/30/2024 National Heart, Lung and Blood Institute (NHLBI) via Aqualung Therapeutics Corp. $259,000 DC.
PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R-41- AI177187- A0 STTR- ""Therapeutic targeting of eNAMPT to attenuate sulfur mustard-induced inflammation, fibrosis and multi-organ injury". 4/1/2023 - 3/30/2024. National Institute Allergy Infectious Disease (NIAID) via Aqualung Therapeutics Corp. $259,000 DC.
PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

PENDING GRANTS – CO- INVESTIGATOR

R01- "Sleep and circadian rhythms in survivors of critical illness" National Heart, Lung and Blood Institute (NHLBI)
PI: Sai Parthasarathy MD. CoI: Joe G.N. Garcia, MD.

CURRENT RESEARCH GRANTS– SPONSOR/MENTOR

"Genomic and Transcriptomic Influences on Heparin-Induced Thrombocytopenia (HIT)" National Heart, Lung and Blood Institute (NHLBI) K01 2018-2023, $455,151 (Direct Costs). PI: Jason Karnes PharmD, PhD. Sponsor: Joe G.N. Garcia, MD

"*SELPG1* polymorphisms in ARDS in African Americans." National Heart, Lung and Blood Institute. K-08 HL 120021, $455,151 (Direct Costs). PI: Christian Bime, MD. Sponsor: Joe G.N. Garcia, MD

PREVIOUS COMPLETED RESEARCH GRANTS >$3M– PRINCIPAL INVESTIGATOR

R-42-HL145930 STTR- "Novel Therapeutic Antibody Targeting of Extracellular NAMPT in Ventilator-Induced Lung Injury (VILI)" 6/2019–5/2022 NHLBI via Aqualung Therapeutics, Corp. $1,468,204 DC
PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

P-01 HL126609-A1 PPG "Cytoskeletal Regulation of Lung Endothelial Pathobiology in ARDS." National Heart, Lung and Blood Institute (NHLBI). 4/1/2016-3/31/2021. NCE Total Direct Costs: $8,307,207. Total Costs $11,715,253. Program Director/PI- Joe G.N. Garcia, MD. Project #1: Structure-Function Analysis of nmMLCK in EC Barrier Responses. Project Leader: Joe G.N. Garcia, MD.

- Project #2: Mechanisms of Peripheral Remodeling of the EC Cytoskeleton. Co-I: Joe G.N. Garcia, MD.
- Core A Administrative Core: Core Leader: Joe G. N. Garcia, MD.
  Final PPG Score: 10

P01 HL98050 PPG "Role of sphingolipids in lung pathobiology." National Heart, Lung and Blood Institute (NHLBI), 2011-2016, Total Direct Costs: $9,878,593. Total Costs $15,810,145.
Program Director - Viswanathan Natarajan, PhD; Co-PI-Joe G.N. Garcia, MD.

- Project #2: Differential Role of S1P Receptors in Inflammatory Lung Injury
  Project Leader: Joe G. N. Garcia, MD.
- Core C- Preclinical models of ARDS
  Core Leader: Joe G. N. Garcia, MD.
- Core D- Genetics of ARDS
  Core Leader: Joe G. N. Garcia, MD.

U01 HL105371-01- "Carbon Monoxide for Idiopathic Pulmonary Fibrosis" National Heart, Lung and Blood Institute (NHLBI) June 2011-2014
Total Direct Costs: $2,136,737. Total Costs: $3,572,593.
Program PIs: Augustine Choi MD (Harvard Medical School), Joe G.N. Garcia, MD.

PPG P01 HL58064 "Cytoskeletal regulation of lung endothelial pathobiology." National Heart, Lung and Blood Institute (NHLBI). Program Project NHLBI, 1998-2013, Total Direct Costs: $10,578,593. Total Costs $16,510,145. PI- Joe G.N. Garcia, MD.

- Project #1: Regulation of Lung Pathobiology by nmMLCK.
  Project Leader: Joe G. N. Garcia MD. (This project scored a 10)
- Core A, Administrative Core. Core Leader: Joe G. N. Garcia, MD.

U01 HL 66583 "Applied genomics in cardiopulmonary disease." National Heart, Lung and Blood Institute (NHLBI). 2000-2004. $2,400,000 Annual Direct Costs. Total Costs: $14,000,000. Overall Program PI: Joe G. N. Garcia, MD.

T32 HL 07534-21 "Multidisciplinary Training Program in Lung Diseases." National Heart, Lung and Blood Institute (NHLBI). 2002-2007, $5,612,775 Total Direct Costs. PI: Joe G.N. Garcia, MD.

P50 HL 073994 "Molecular Approaches to Ventilator-Associated Lung Injury." NHLBI Specialized Centers of Clinically Oriented Research (SCCOR), 2003-2008, $13,740,424. Total Direct Costs. $21.2 M Total Costs. Overall Program Director: Joe G.N. Garcia, MD (until 5/05).

- Project #4: Novel Therapies for VALI-induced Vascular Leak. $1,110,930 Total Direct Costs. Project Leader: Joe G. N. Garcia, MD.

PREVIOUS COMPLETE RESEARCH GRANTS (<$3M) – PRINCIPAL INVESTIGATOR 2005-present

R-41- HD101202-01 STTR- "Extracellular NAMPT is a Novel Therapeutic Target in Chorioamnionitis-Related Prematurity (ChorP)" 09/08/2020 - 8/31/2021 NIH/NHLBI via Aqualung Therapeutics Corp. $265,000 DC
PI: Joe G.N. Garcia, MD. CEO and Founder, Aqualung Therapeutics Corp.

R41-HL147769-01 NIH STTR Phase I award "The CRIT-ICU Biomarker Panel for Stratification of Mortality Risk in ARDS Patients" 08/08/2019 - 8/07/2020 NIH/NHLBI via Aqualung Therapeutics Corp. $160,000 DC
PI: Joe G.N. Garcia, MD.

R41-HL140741 NIH STTR Phase I award "Novel Targeting of the S1P Receptor, S1P1, and Nox4 as Therapeutic Approaches in ARDS" 2/17/2018 – 2/16/2020 NHLBI via ReStore Therapeutics, LLC. $188,294 DC
PI: Joe G.N. Garcia, MD.

R01-HL91889- "nmMLCK Contributes to Genetic and Environmental Asthma Susceptibility" (renewal). National Heart, Lung and Blood Institute (NHLBI). April 2008-2019. Total Direct Costs: $1,593,671. Multiple-PI: Joe G.N. Garcia, MD and Ting Wang, PhD.

R01-HL 125615- "Regulation of non-muscle myosin light chain kinase structure and function in ARDS". National Heart, Lung and Blood Institute (NHLBI). 9/1/2015-8/31/2019. Total Costs $2,493,018. PI: Joe G.N. Garcia

U01 HL112696- UCSF/University of Arizona. "GRADS- Genomic Regulation of Alpha 1 Antitrypsin Deficiency and Sarcoidosis" Clinical Network" National Heart, Lung and Blood Institute (NHLBI) 5/1/2012-4/30/2016. Total Direct Costs: $368,747. Total Costs: $592,693.
Program Multiple-PIs: Laura Koth, MD (UCSF) & Joe G.N. Garcia, MD (UA).

RC2 HL101740-01 "Novel Biomarkers and Phenotyping Tools in Idiopathic Fibrosis"
Program PI: Fernando Martinez, MD, University of Michigan, 2010-2013
Joe G.N. Garcia, MD. 5% effort, Core Leader for Genomic Analyses

U01 HL105371-01-Ancillary Grant- "Genomic Signatures in Idiopathic Pulmonary Fibrosis"
National Heart, Lung and Blood Institute (NHLBI) September 2011-2014
Total Direct Costs: $368,747. Total Costs: $592,693
Program PI: Joe G.N. Garcia, MD.

U01 HL105371- Brigham & Women's Hospital/University of Arizona. "Phase II Study of Inhaled Carbon Monoxide for the Treatment of Idiopathic Pulmonary Fibrosis" National Heart, Lung and Blood Institute (NHLBI) 9/24/2010-6/30/2015. Total Direct Costs: $134,491. Total Costs: $181,532. Multiple-PIs: Joe G.N. Garcia, MD (UA) & Ivan O. Rosas, MD (Brigham).

R41 HL110707 STTR- "Aqualung Therapeutics, Corp." "PBEF Neutralizing Humanized Monoclonal Antibodies As Novel Therapeutic Approaches" 9/1/2011-6/30/2014.Total Direct Costs: $500,000. Total Costs: $631,234.
Program PI: Joe GN Garcia MD.
Phase-I. These efforts are to generate a novel therapeutic strategy in ventilator-induced lung injury.

R13HL116010-01 "Translational Approaches to Reducing Health Disparities in Lung Disease"
Direct Cost: $25,000
Principal Investigator: Joe G.N. Garcia, MD. July 2012-2013.

SBIR "Improved Formulations to Enhance Bio-availability for Antisense Therapeutics Chemical and Biological Defense (CBD)"SBIR- Small Business Innovation Research HDTRA1-10-P-0041
Program PI: Luis Nunez, LNK Chemsolutions LLC. Department of Defense. 5/2010-11/16/2010.
Joe G.N. Garcia 5%. Phase-I. These studies utilizing nanotechnology to develop new delivery and strategies for therapeutics in acute lung injury/sepsis.

R01-HL-91889 "Regulation of Asthmatic Inflammation by Non-Muscle MLCK." National Heart, Lung and Blood Institute (NHLBI), September 2008-2012
Total Direct Costs: $1,695,043.
PI: Joe G. N. Garcia, MD.

R01- HL-90860 "Regulation of Lung Barrier Function by Endothelial Cell Myosin Light Chain Kinase." National Heart, Lung and Blood Institute (NHLBI), September 2008-2012; $1,495,049. Total Direct Costs. PI: Joe G. N. Garcia, MD. (relinquished with PPG HL50864 renewal)

U01 "NHLBI Program in Proteomics." Program PI: Jenny Van Eyck, PhD, Johns Hopkins University, 2002-2009 (subcontract) U01 $18,500,000, Total Costs.
Project #2 Leader: Post-translational modification of endothelial cell myosin light chain kinase.
Project Direct Costs- $30,000/yr
Project Leader: Joe G.N. Garcia, MD.

U01 "Re-engineering Translational Research at the University of Chicago" NIH Roadmap CTSA $26,077,000 (2007-2012) PI: Julian Solway MD, Training Cluster Director: Joe G. N. Garcia, MD. 10% effort

R01 "Sickle Cell Anemia- Insights into Pulmonary Hypertension" Program PI- Victor Gordeuk, Howard University, 2005-2010 (subcontract) Joe G.N. Garcia, MD Project Leader: Functional Genomics and Bioassays

U50 "Health Effects of Particulate Matter" –Environmental Protection Agency RD83241701
Program PI- Jon S. Samet, Johns Hopkins University, 2005-2010 (subcontract) $1,250,000 (Direct Costs)/year, Project Direct Costs- $128,800/yr
Joe G.N. Garcia, MD- Project Leader: Functional Genomics and Bioassay Program.

ISSUED PATENTS (Issued Patents as Inventor)

"Methods and Compositions involving pre-B-cell colony enhancing factor (PBEF) inhibitors for lung inflammation conditions and diseases" Inventor: Joe G.N. Garcia. US Provisional Patent- ARCD 474 USP1, Office of Technology and Intellectual Property Office, University of Chicago - July 23, 2009. Office of Technology Management, University of Illinois at Chicago - July 23, 2010. Publication US20110020364 - January 27, 2011. This application has been allowed and was issued as a patent on August 9, 2016 as **U.S. Patent 9,409,983. Expiration 2031.**

"Use of opioid antagonists to attenuate endothelial cell proliferation and migration" "Use of opioid antagonists" Inventor: Joe G.N. Garcia, Jonathan Moss, Mark Lingen, Patrick A. Singleton, Chun-Su Yuan. Publication #: 20180008594. Office of Technology and Intellectual Property Office, University of Chicago. US/06007892 - March 7, 2006. International filing, PCT/US2006/007892 - March 7, 2006. PCT/US2007/066806 - April 17, 2007. Publication, US20060258696 - November 16, 2006. Publication US20100286059 - November 11, 2010. Filed again July 7, 2017; September 14, 2017. This application has been allowed and was issued as a patent on June 13, 2017 as **U.S. Patent 9675602,** issued as a patent on August 1, 2017, **U.S. Patent 9717725.** issued as a patent on May 30, 2017 as **U.S. Patent 9,662,390. Expires 2035.**

"Biomarkers for assessing idiopathic pulmonary fibrosis" Inventor: Joe G.N. Garcia, Imre Noth, Huang Yong, Jose D. Herazo-Maya, Naftali Kaminski, Kevin Gibson. Pub #- 20180320234. Office of Technology Management, University of Illinois at Chicago, US Patent- 61/561,543 - November 18, 2011. UIC Tech ID DG076 (UIC-2013-077). International filing - PCT/US2012/065540, November 16, 2012. **Issued as a patent on July 31, 2018 as U.S. Patent– 10,036,069. Currently receiving royalties. Expires 2035.**

"Method of treating acute lung injury using sphingosine 1 phosphate analogs or sphingosine 1 phosphate receptor agonists" Inventor: Joe G.N. Garcia, Steven M. Dudek. Publication # 20130079309. Office of Technology Management, University of Illinois at Chicago. US Provisional Patent- 61/309,948, March 3, 2010. US Patent- 13/582627 - March 3, 2011. International filing - PCT/US2011/027074, March 3, 2011. Publication, US20130079309, March 28, 2013. U.S. Application No. 15/504,168. **This application is being reviewed as U.S. Patent 10,633,710. Expires 2035.**

"Methods for detecting gene expression associated with recurrence freee survival in cancer patients" Pub #- 10633710. Inventor: Joe G.N. Garcia. Tech Transfer Arizona, University of Arizona, UA15-028,UAZ34078/ US1/PRO, US Provisional Patent- 62/037,744 - August 14, 2015. **Issued as a patent on April 28, 2020 as U.S. Patent–10,633,710. Expires 2035.**

"Compositions and methods for treating and preventing lung injury including ventilation-induced injury". Inventors: Donna D. Zhang, Georg T. Wondrak, Joe G. N. Garcia, Ting Wang. Pub #- 10300036. **Issued as a patent on May 28, 2019 as U.S. Patent–10,300,036; U.S. Patent–15,765,777. Expires 2035.**

"Compositions And Methods For Treating Pulmonary Fibrosis: Targeting extracellular NAMPT and TLR4" Inventor: Joe G.N. Garcia, Louise Hecker. Pub #- 20200138799. U.S. Method of Use PCT Filed in 2018-U.S. & Select Global Markets. **Issued on February 21, 2021 as U.S. Patent–10,993,936. Expires 2038**

"Compositions And Methods For Treating Pulmonary Arterial Hypertension: Targeting extracellular NAMPT and TLR4. Inventor: Joe G.N. Garcia. Pub #- 20200148789. U.S. Method of Use PCT Patent -Filed in 2018 - U.S. & Select Global Markets. **Issued as a patent on February 21, 2021 as U.S. Patent–10,975,167**. **Expires 2038.**

"Compositions of Matter Patent Anti-NAMPT Antibodies and Uses Thereof". Inventor: Joe G.N. Garcia, Darragh McCann. Pub #- 2021026508. U.S. Compositions of Matter PCT Patent Filed in August 2019 -U.S. & Select Global Markets. **Issued as a patent on October 12, 2021 as U.S. Patent–10,633,710**. **Expires 2040**

FILED PROVISIONAL PATENTS

"Compositions and methods for treating pulmonary hypertension" Inventor: Joe G.N. Garcia, Mardi Gomberg Maitland, Mark Ratain, Michael Maitland, Liliana Moreno. Publication # 20090197922. Office of Technology and Intellectual Property Office, University of Chicago. US 60/761,612 - January 24, 2006. US 60/833,934- July 28, 2006. International filing, PCT/US2007/060995 - January 24, 2007.

"Method for treating endothelial and epithelial cell disorders by administering high molecular weight PEG-like compounds" Inventor: Joe G.N. Garcia, John C. Alverdy, Steven Dudek. Publication # 20090186949. Office of Technology and Intellectual Property Office, University of Chicago. US 60/778,165 - February 28, 2006. US 60/787,548 - March 29, 2006. International filing, PCT/US2007/063007 - February 28, 2007.

"Method and compositions for treating diseases and conditions involving higher molecular weight hyaluronan" Inventor: Joe G.N. Garcia, Patrick A. Singleton. Publication # 20100249064. Office of Technology and Intellectual Property Office, University of Chicago. US 60/970,857 - September 7, 2007. International filing, PCT/US2008/075437 - September 5, 2008.

"Nitrated sphingosine 1-phosphate 3 receptor as a predictor of acute lung injury-associated mortality" Inventor: Joe G.N. Garcia. Publication # 20140323545Office of Technology Management, University of Illinois at Chicago , US Patent- 61/515,527- August 5, 2011. International filing - PCT/US2012/049761. August 6, 2012. Publication, WO/2013/022841, February 14, 2013.

"Methods and compositions using oxidized phospholipids" Inventor: Joe G.N. Garcia. Konstatin Birukov, Norbert Leitinger, Valery Bochkov. Publication # 20120028921Office of Technology and Intellectual Property Office, University of Chicago. Publication, US20120028921- July 6, 2012.

"Modulation of cell barrier dysfunction" Inventor: Joe G.N. Garcia. John C. Alverdy, Jonathan Moss, Mark W. Lingen, Patrick A. Singleton. Publication # 20140142133. Office of Technology and Intellectual Property Office, University of Chicago. Publication, US20120316190- October 23, 2013.

"Genetic variants in interstitial lung disease subjects" Inventor: Joe G.N. Garcia, Imre Noth, Naftali Kaminski. Office of Technology and Intellectual Property Office, University of Chicago, US Patent- 61/759,820 5. - February 1, 2013. International filing - PCT/US2014/014395, February 3, 2014.

"Compositions and methods for detecting complicated sarcoidosis" Inventor: Joe G.N. Garcia. Tong Zhou, Wei Zhang, Roberto Machado. Pub #- 20150133333. Tech Transfer Arizona, University of Arizona, UA15-193, UAZ-34465/US-1/PRO, US Provisional Patent- 62/161,521, May 14, 2015.

A Novel microRNA Regulated Peripheral Blood Gene Signature Differentiates Sarcoidosis Inventor: Joe G.N. Garcia.

"Method of diagnosing or monitoring Radiation induced Lung Injury by detecting eNAMPT levels". Inventor: Joe G.N. Garcia. Pub #- 20200132689. Provisional Patent Filed in October 31, 2019 -U.S. & Select Global Markets (pending). Expires 2039.

Method of Use Provisional: *NAMPT* Genotyping Prediction Assay Inventor: Joe G.N. Garcia.
Method of Use PCT: NAMPT Genotyping Prediction Assay Provision Patent Filed in August 2020 (covering all indications)

"SNP detection for treating Chorioamnionitis; NASH, Cardiac Ischemia, Trauma, Provisional Patents filed August 2020. Method of Use Inflammatory Conditions Provisional: Expires 2041.

"Prostate Cancer detection nd treatment by detecting SNPs in NAMPT". PCT Provisional Patents filed August 7, 2020. Enter National Phase by February 7, 2022. Expires 2040.

BIOTECH STARTUP COMPANIES

Aqualung Therapeutics Corporation. Founder and CEO. November 2011-2016 (Delaware), 2016- 2020 Arizona). February 2021-present (Delaware).
Restore Therapeutics Corporation. Co-Founder and CSO. November 2016-2018.

EDUCATIONAL ACTIVITIES-TEACHING/MENTORING:

Primary Mentor for NIH K-08, K-23 or K-01 Funded Trainees- (in chronologic order)

1) Kane L. Schaphorst, MD. Pulmonary Fellow in laboratory, 1991-1995.
K08 HL 03666 "Mechanisms of Vascular Barrier Regulation." 1997-2002. American Heart Established Investigator. Present position: Professor of Medicine, U. South Alabama, Mobile, AL.

2) Irina Petrache, MD. Pulmonary Fellow in laboratory, 1998-2000. K08 HL 04396. "Cytoskeletal Regulation of Endothelial Cell Apoptosis." 2000-2005. Present position: Professor of Medicine, Chief of Pulmonary Division, National Jewish Hospital, University of Colorado, CO.

3) Steven M. Dudek, MD. Pulmonary Fellow in laboratory, 1998-2003. K08 HL 70013 "Endothelial cell cytoskeletal regulation by cortactin". 2002-2007. Present position: Professor of Medicine, Chief of Division of Pulmonary, Critical Care, Sleep, and Allergy, University of Illinois at Chicago, IL.

4) Randal O. Dull, MD. Faculty Trainee in Laboratory, 1999-2003. K-08 "Endothelial Glycocalyx Regulation of Permeability." 2000-2005. Present position: Professor of Anesthesiology, former Chair, Department of Anesthesiology, University of Arizona. AZ.

5) Ari Lev Zaiman, MD, PhD. Pulmonary Fellow in laboratory, 2000-2003. K08 "Modifier genes in pulmonary hypertension". 2004-2009.Present position: Private Practice, Baltimore MD.

6) Bryan J. McVerry, MD. Pulmonary Fellow in laboratory, 2002-2005. K-08 "Novel barrier enhancement in canine lung injury". 2003-2008. Present Position: Associate Professor of Medicine, University of Pittsburgh, PA.

7) Stephanie A. Nonas, MD. Pulmonary Fellow in laboratory, 2003-2005. K-08 "*COX2* in Ventilator-Induced Lung Injury". 2003-2008. Present Position: Associate Professor of Medicine, Oregon University, Portland, OR.

8) Jeffrey R. Jacobson, MD. Pulmonary Fellow in laboratory, 2001-2004. K-08 "Mechanisms of simvastatin -induced endothelial cell barrier protection". 2005-2010. Parker B. Francis Foundation Awardee. Present position: Professor of Medicine, University of Illinois at Chicago, Chicago, IL.

9) James H. Finigan, MD. Pulmonary Fellow 2003-2005). K08 "Novel Role of Activated Protein C in ARDS". 2006-2011. Present Position: Professor of Medicine, University of Colorado School of Medicine, Denver, CO.

10) Rachel K. Wolfson MD. Faculty Mentee 2007-2012. K08 "Role of HMGB1 and RAGE receptors in acute inflammatory lung injury". 2008-2013. Present position: Professor of Pediatrics, University of Chicago, Chicago, IL.

11) Roberto F. Machado MD. Faculty Mentee 2008-2013. K23 "Carbon monoxide therapy in severe pulmonary hypertension". 2010-2015. Multiple R01s. Present Position– Professor of Medicine, **Director of Division of Pulmonary and Critical Care Medicine**, Indiana University, Indianapolis, IN.

12) Tony Kim, MD. Faculty Mentee 2005-2008. K-08 "Endocardial Thrombosis in Cardiac Transplant Rejection." 2007-2012. Present position: Professor of Medicine, University of Washington, Yakima Heart Center, Seattle, WA.

13) Rebecca A. Schilling MD. Faculty Mentee 2006-2008. K-08 "ICOS as a co-stimulatory molecule in lung inflammation" 2006-2011. Present position: Professor of Medicine, Indiana University, Indianapolis, IN.

14) Christian Bime MD. Faculty Mentee 2015-present. K-08 "*SELPLG* as a candidate gene in Acute Respiratory Distress Syndrome". 2018-2023. Present Position– Associate Professor of Medicine, University of Arizona, Tucson, AZ.

15) Jason Karnes PhD, PharmD. Faculty Mentee, 2016- present. K-01 "Genomic and Transcriptomic Influences on Heparin-Induced Thrombocytopenia". 2018-2023. Present Position: Associate Professor of Pharmacy, University of Arizona, Tucson, AZ.

16) Belinda Sun MD, PhD. Faculty Mentee 2015-present. K-08 pending "Targeting eNampt signaling to prevent aggressive prostate cancer progression." Present Position: Associate Professor of Pathology, University of Arizona, Tucson, AZ.

Graduate Students PhD

1) Shwu Fan Ma, PhD. – Indiana University Graduate Student, Department of Physiology and Biophysics, (1993-1996). "Molecular cloning of the thrombin receptor."Graduate student and Post-doctoral Fellow, 1995-2002. American Heart Association Graduate Student Award, "Thrombin Regulation of Thrombomodulin in Smooth Muscle and Endothelium." Indiana AHA Graduate Student Award.
   Thesis Advisor: Joe G.N. Garcia, M.D. Indiana University
   Present position: Research Associate Professor of Medicine, University of Virginia, Charlottesville, VA.

2) Alicia Rizzo, MD PhD. University of Illinois Chicago Graduate Student, Department of Pharmacology (2011-2014). "Cytoskeleton regulation of vascular permeability".
   Thesis Advisor: Joe G. N. Garcia, M.D., University of Illinois Chicago

Present position: University of Colorado Pulmonary Fellowship, Denver, CO.

3) Yuka Shimizu, PhD. Univeristy of Illinois Chicago Graduate Student, Department of Molecular Biochemistry (2011-2014). "Epigenetic regulation of MLCK expression in asthma".
Thesis Advisor: Joe G. N. Garcia, M.D., University of Illinois Chicago
Present position: Sanger Research Institute, London, UK.

4) Venkateswaran Ramamoorthi, MS. PhD. Univeristy of Illinois Chicago Graduate Student, Department of Pharmacology (2011-2016). "DNA Methylation of the Visfatin gene in ventilator-induced lung injury".
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona,
Present position: Postdoctoral Fellow, University of Michigan, Ann Arbor, MI.

5) Nancy Casanova MD, PhD. University of Arizona Graduate Student. Clinical and Translational Science Program. "Evaluation of Omics applications to sarcoidosis sub-phenotypes"
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona.
Present position: Research Assistant Professor, Unversity of Arizona, Tucson, AZ.

6) Heather Lynn, PhD. Univeristy of Arizona Graduate Student, Physiology (2017-2021). "Evaluation of Genome-Wide DNA Methylation as a Mortality Signature in ARDS".
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona.
Present position: PostDoctoral Fellow, Cedar Sinai, Los Angeles, CA

7) Scott Younger PhD candidate. Univeristy of Arizona Graduate Student, Biomedical Engineering (2020-2022). "AFM characterization of inflammation-induced mechanical transformations in vascular edema/recovery".
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona.
Present position: Graduate Student, Physiology BioSciences, Unversity of Arizona, Tucson, AZ.

8) Marisela Rodriguez PhD candidate. University of Arizona Graduate Student. Clinical and Translational Science Program. "Mechanisms of eNAMPT secretion by inflammation and hypoxia"
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona.

9) Saad Sammani MD, MS, PhD candidate. Univeristy of Arizona College of Medicine Clinical and Translational Science Program. "eNAMPT as a druggable target in ARDS"
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona.
Present position: Research Associate Professor, Unversity of Arizona, Tucson, AZ.

Masters Students MS

1) Nancy Casanova MD, PhD. Univeristy of Arizona College of Public Health.
"Evaluation of Omics applications to sarcoidosis sub-phenotypes"
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona.
Present position: Researh Assistant Professor, Unversity of Arizona, Tucson, AZ.

2) Saad Sammani MD, MS. Univeristy of Arizona College of Medicine Clinical and Translational Science Program.
"eNAMPT as a druggable target in ARDS"
Thesis Advisor: Joe G. N. Garcia, M.D. University of Arizona.
Present position: Research Associate Professor, Unversity of Arizona, Tucson, AZ.

Mentor for Additional MD, PhD Trainees and Fellows (in chronologic order)

Chris Bahler, MD, PhD. Pulmonary Fellow in laboratory, 1990-1992.
1991 Midwest AFCR Trainee Award, 1991 National AFCR Trainee Award
Present position: Private practice, Kokomo, Indiana

Jerome E. Stasek, MD. Pulmonary Fellow in laboratory, 1990-1993.
American Heart Association Fellowship Award. "Ischemia/Reperfusion Activation of Human Endothelium: Role of Protein Kinase C." 1990 Midwest AFCR Trainee Award, 1991 National AFCR Trainee Award, 1992 John B. Hickam Award for Most Meritorious Post Doctoral Fellowship Application from the Indiana American Heart Association.
Present position: Associate Professor of Medicine,The Ohio State University, Columbus, OH.

Sandeep Gupta, MD. Pediatric Gastroenterology Fellow in laboratory, 1995-1996.
"Inducible iNOS mRNA in inflamed esophageal/colonic mucosa in pediatric populations."
Present Position: Professor of Pediatrics, Indiana University, Indianapolis, IN.

Harold Davis, PhD. Post-Doctoral Fellow, in laboratory 1990-1993.
Awarded NIH FIRST Award, 1993. Indiana AHA Grant-in-Aid Award, 1991.
Present position: Professor, Xavier University, Cincinnati, OH.

Alexander D. Verin, PhD. Post-doctoral Fellow in laboratory 1994-1999.
Midwest AFCR Trainee Award, 1994. American Lung Association Grant-in-Aid Research Award. American Heart Association Research Award. Multiple R01s.
Present position: Professor of Physiology, Medical College of Georgia, Augusta, GA.

Shu Shi, MD. Post-doctoral Fellow, 1994-1996.
American Heart Association Postdoctoral Fellowship. American Heart Association Indiana Affiliate Fellowship Award. "Role of Genetic Variants in Ventilator Associated Lung Injury".
Present Position: Research Scientist, Eli Lilly Company, Indianapolis, IN.

Raj Wadgaonkar, PhD. Post-doctoral Fellow 2000-2004.
VA Merit Award. Multiple R01s.
Present Position: Associate Professor of Medicine, SUNY, Stony Brook, NY.

Patrick A. Singleton, PhD. Post-Doctoral Research Fellow, 2004-2008.
American Heart Association Scientist Award. Multiple R01s.
Present Position- Associate Professor of Medicine, City of Hope Center Center, Los Angeles, CA

Michael Ober MD. Post-doctoral Fellow 1996-1998.
American Lung Association Fellowship Award. "Neutrophil migration activates the endothelial cytoskeleton." 1998-2000.
Present Position: Associate Professor of Medicine, Indiana University, Indianapolis, IN.

Kostya G. Birukov, PhD. Post-Doctoral Research Fellow, 1998-2002. Multiple R01s.
Present Position: Endowed Professor of Medicine, Director of Center for Vascular Biology, University of Maryland, Baltimore, MD.

Li Gao, PhD. Research Fellow, 2002-2005.
"Association/function of MLCK SNP with acute lung injury."
Present Position: Research Associate, Pulmonary and Critical Care Medicine, Johns Hopkins University, Baltimore, MD

Jaideep Moitra, PhD. Post-doctoral Fellow 2003-2005. Faculty mentee 2005-2011.
Present position: Senior Vice Presidentof Research and Development, Gennova Biopharmaceutical Inc., Pune, India.

Liliana Moreno, PhD. Post Doctoral Research Fellow. 2004-2009.
Present Position: (Retired) former Research Associate Professor of Medicine, University of Arizona, Tucson, AZ.

Gabriel D. Lang MD. 4th year UIC Medical Student in lab, 2007-2008.
"Effect of Particulate Matter on Cardiopulmonary Toxicity."
Present position: Assistant Professor of Medicine, Washington University, St. Louis, MO.

Sascha N. Goodewardena, MD. Internal Medicine Resident in lab 2006-2007. "Effect of "Particulate Matter on Cardiopulmonary Toxicity".
Present Position: Assistant Professor of Medicine, University of Michigan.

Ting Wang PhD. Post-Doctoral Research Fellow, 2007-2010, Faculty mentee 2010-2015.
"Toxicogenomic Assessment of Ambient Particulate Matter Induced Cardiac Toxicity"
Parker B. Francis Awardee. AHA Scientist Award. R01-funded.
Present Position: Professor of Physiology, Florida International University, Miami, FL.

Biji Mathew PhD. Post-Doctoral Research Fellow, 2007-2010.
Present Position: Research Associate Professor, University of Illinois at Chicago, IL.

Sumegha Mitra PhD. Post-Doctoral Research Fellow, 2008-present.
American Lung Association Award. American Cancer Society Award. R01.
Present Position: Assistant Professor of Biochemistry & Molecular Biology, Indiana University, Indianapolis, IN.

Mardi Straitland Gomberg MD. Faculty Mentee 2005-2008.
Doris Duke Clinical Scientist Award. (K23 equivalent) "Sorafenib as therapy in pulmonary arterial hypertension." 2006-2011.
Present position: Associate Professor of Medicine, Department of Medicine, Virginia Commonwealth University, Richmond , VA.

Ankit A. Desai MD. Internal Medicine Resident, Fellow, Faculty Mentee. 2006-2018.
American Heart Association- National Population & Mentored Clinical Research Program.
"Integrating Genomic Approaches to Pulmonary Hypertension of Sickle Cell Disease".
NIH-NCRR KL2 Scholars Award. Multiple R01s.
Present position: **Associate Professor of Medicine, Division of Cardiology**, Indiana University.

Joseph Macarhena PhD Post-Doctoral Research Fellow, 2016-2019. Research Assistant Professor Unversity of Arizona, Tucson, AZ. 2019-2020. Research Associate Professor 2021.
Present position: Vertex Biologics.

Radu Oita PhD Post-Doctoral Research Fellow, 2016-2019. Research Assistant Professor Unversity of Arizona, Tucson, AZ. 2019-2020.
Present position: on personal leave.

Thesis Advisor/Committee Member-Graduate Student Trainees

Devrim Pesem, PhD. Johns Hopkins University Graduate Student, Department of Biological Chemistry, (2002-2004).
Thesis Committee Member: Joe G.N. Garcia, MD. Johns Hopkins University
Present position: Associate Professor, İzmir Institute of Technology, Turkey.

Celeste M. Nelson, PhD. Johns Hopkins University Graduate Student, Department of Biomedical Engineering, (2002-2004).
Thesis Committee Member: Joe G.N. Garcia, MD. Johns Hopkins University
Present position: Associate Professor of Chemical & Biological Engineering and Molecular Biology, Princeton University, NJ.

Kammran Fehrez, MD. Univeristy of Illinois Chicago Graduate Student, Department of Pharmacology, (2010-2012).
Thesis Committee Member: Joe G.N. Garcia, MD., University of Illinois Chicago
Present position: Private Practice, Pathology, Chicago, IL.

Visiting Scientists Trained in the Laboratory

Csilla Csortos, PhD. Visiting Post-Doctoral Fellow in laboratory, 1996-1998.
"Phosphatase regulation of the EC cytoskeleton."
Present position: Professor, University of Debecen, Hungary.

Sang Bum Hong, MD. Visiting Scientist in laboratory, 1996-1998.
"PBEF in Acute Lung Injury".
Present position: Associate Professor of Medicine, University of Seoul, Korea.

Natasha V. Bogatcheva, PhD. Visiting Post-doctoral Fellow in laboratory, 1996-1998.
"Role of myosin phosphatase in vascular injury".
Present position: Research Professor of Medicine, Medical College of Georgia

Yasushi Shikata, MD. Visiting Post-doctoral Fellow in laboratory, 2001-2002.
"Role of Rho GTPases in endothelilal barrier regulation".
Present position: Chief Physician, Fujitsuna Hospital/Okayama University Medical School, Japan.

Kamon Kawkitinarong, MD. Visiting Pulmonary Fellow, 2002-2004.
"Role of mechanical stress on vascular responses".
Present Position: Professor, Chulalongkorn University, Pathumwan, Thailand

Armand Mekontso Dessap MD. Visiting Faculty Scientist, 2010-2012.
"Role of ventilator recruitment maneuvers on cardiopulmonary genomic responses".
Present Position: Professor, University of Paris. Head, Critical Care Unit Medicine, Henri Mondor Hospital, East Creteil, France.

Carlos Flores PhD. Visiting Post-Doctoral Research Fellow, 2005-2007.
"Role of Genetic Variants in Ventilator-Associated Lung Injury".
Present Position: Senior Research Scientist, Instituto Geneticos, Tenerife, Canary Islands Spain.

SUMMER RESEARCH PROGRAMS FOR STUDENTS

The Garcia Laboratory has provided over 100 high school students, over 100 college students, and over 50 Medical Students with a meaningful research exposure, many times a summer research experience but often for extended periods of time. In addition, Dr Garcia has created **several summer research programs** which are largely targeting African descent and Latino students. These include**:**

- **Johns Hopkins University Summer Research Exposure for Underrepresented Minorities: 1999-2005.** This NIH-funded program (T35 HL07963, PI JGN Garcia) was designed to address the hypothesis that the lack of minority students in the biomedical research pipeline is not due to a lack of talent but due to a lack of opportunity. Minority high school students, graduate students, and fellows (20 students/year) were chosen from a national pool of URM applicants, for a 10 week highly mentored research experience. Over 100 African American and Latino students were trained in this program with 74% ultimately entering graduate school or a US medical school, several as MD/PhD candidates. All undergraduate students completed their 4 year degree and all medical students completed medical school degree.
- **University of Chicago ROCK Program: 2005-2010**
- **University of Illinois Chicago Summer Research Exposure: 2010-2013**
- **University of Arizona Programs:**

Border Latino & American Indian Summer Exposure to Research (BLAISER) 2015-present. Dr. Garcia created a novel summer program, **BLAISER,** designed to empower undergraduates majoring in the biomedical fields to participate in cutting-edge research while preparing for a translational career in medicine or biomedical research. The program (10 students/year) has been extraordinarily successful in pairing promising students with top UAHS scientists to provide exposure to cutting edge research, guidance, advice, and assistance in navigating a career as a health science professional and/or in translational health sciences. The BLAISER experience includes a stipend and housing for students and has mentored 75 students with 15% of these students now in medical school and 24% in graduate school. 52% of students are in process fo graduating from their 4 year college/university.

Joe GN and Elda D Garcia Career Internship Program for Latino Students (JEG). 2018-present. Focusing on enhancing the educational opportunities of border students to attend and graduate from 4 year schools, Dr. Garcia created a unique opportunity for underserved highly talented junior year high school students of Hispanic/Latino descent. The pool is derived from 3 Souther Arizona school districts Sunnyside SD, Nogales SD, and Santa Cruz SD high schools, each with >90% Latino, largely socioeconomically-challenged enrollment. Rigorous selection process for a 7 week immersion within the internationally-diverse Garcia Laboratory. Students learn how to conduct basic, translational, and clinically innovative research under the direct mentorship of a University of Arizona scientist. Currently in year two of the JEG Program, all 7 inaugural students were accepted into 4 year Universities, the majority with financial aid. Each student receives the enduring support of a community of talented researchers that will provide advice, counseling and career planning. The JEG Program experience includes a stipend and expanded to 11 students in year two.

CURRENT JOURNAL EDITORIAL ACTIVITIES:

Associate Editor:

Pulmonary Circulation (2010-present)

Editorial Board Member:

American Journal of Respiratory and Critical Care Medicine (2008-present)

PAST EDITORIAL ACTIVITIES:

Co-Editor in Chief

Microvascular Research (2002-2013)

Managing Editor-in-Chief

Current Opinion in European Medicine (2002-2004)

Associate Editor:

American Journal of Respiratory Cell & Molecular Biology (1998-2003)
Journal of Stem Cell Research (2003-2013)
Journal of Organ Dysfunction (2005-2013)
Nature: Scientific Reports (2015-2018)
Translational Research (2006-2013)

Encyclopedia of the Microvasculature (D. Shepro Editor) Elsevier 2004
Consulting Editor

Editorial Board Member:

Circulation Research (2002-2007)
American Journal of Physiology: Lung Cellular and Molecular Physiology (1993-2005)
Current Opinion in Clinical Experimental Research (2001-2004)
Journal of Smoking-Related Diseases (1991-1995)
Journal of Laboratory Clinical Medicine (1994-2005)
Endothelium: Journal of Endothelial Cell Research (1999-2013)
Physiologic Genomics (2004-2013)
Journal of Cardiothoracic-Renal Research (2005-2013)
Medicine (2005-2013)
Proceedings of the American Thoracic Society (2005-2013)

Consulting Editor
Respiratory & Pulmonary Medicine Internet Resource Guide, (2000-2001)
eMedguides.com, Inc., Princeton, New Jersey, (2000-2001)

Current Journal Peer Review Activities:

American Journal of Physiology: Cell Physiology; American Journal of Physiology: Lung Cellular and Molecular Physiology; American Journal of Physiology:Heart and Circulation; American Journal of Respiratory Cell and Molecular Biology, American Journal of Respiratory and Critical Care Medicine; Biochemic Biophysica Acta; Blood, Coagulation and Fibrinolysis; British Journal of Pharmacology; Chest; Circulation Research; Critical Care Medicine; Current Opinion in Clinical Experimental Research; Cytogenetics and Cell Genetics; Endothelium; Experimental Lung Research; European Journal of Pharmacology; European Respiratory Journal; FASEB Journal; Genomics; Physiologic Genomics; Heart and Vessel ;Journal of Applied Physiology; Journal of Biochemical Pharmacology; Journal of Biological Chemistry; Journal of Cell Biology; Journal of Cellular Biochemistry; Journal of Cellular Physiology; Journal of Clinical Investigation;Journal of Investigative Medicine; Journal of Laboratory Clinical Medicine.; Journal of Leukocyte Biology;Journal of Pharmacologic Experimental Therapeutics; Journal of Vascular Research Medicine; Microvascular Research; Nature Medicine; Thrombosis Research;Translational Research

CLINICAL ACTIVITIES: CERTIFICATION AND BOARDS:

Licensure: Texas, New York, Iowa, Indiana, Maryland, Illinois
Diplomate, American Board of Internal Medicine, 1983

Diplomate, Pulmonary subspecialty
American Board of Internal Medicine, 1986

Diplomate, Critical Care Medicine subspecialty
American Board of Internal Medicine, 1988

ORGANIZATIONAL ACTIVITIES:
INSTITUTIONAL ADMINISTRATIVE APPOINTMENTS:

The University of Texas Health Center at Tyler:

Member, Medical Intensive Care Unit Committee 1985-1988
Member, Utilization Review Committee 1985-1986
Member, Medical Records Committee 1985-1986
Member, Surgical Case Review Committee 1985-1986
Member, Blood Utilization Review Committee 1985-1986
Member, Human Subjects Investigation Committee 1986-1988

Member, Clinical Research Advisory Committee 1986-1988 (ad hoc chairman)
Member, Feasibility Committee 1987-1988

Indiana University School of Medicine:
Member, Lilly Institutional Review Board 1988-1990 (ad hoc chairman)
Alternate, IUPUI Institutional Review Board (IRB) 1990-1996
Member, Academic Standards Committee 1991-1993
Member, Pulmonary Procedure Committee 1989-1991
Member, Search Committee for Chairman, Dept. of Medicine 1990
Member, Faculty Development Committee, Dept. of Physiology/Biophysics 1991
Member, Space Distribution Committee, Department of Medicine 1991
Member, Search Committee, Dept. of Physiology/Biophysics 1992
Chairman, Pulmonary Research Committee 1988-1992
Member, VA Research and Development Committee 1991-1993
Chairman, VA Research and Development Committee 1993-1994
Member, Junior Clerkship Review Committee 1990-1994
Elected Representative IUPUI Faculty Council 1992-1995
Alternate, Clinical Research Center Advisory Committee 1990-1995
Member, VA Transfusion Committee 1995-1996
Chairman, Minority Health Topic Committee 1992-1996
Member, Tenure and Promotion Committee, Department of Medicine, 1995-1996
Member, Tenure and Promotion Committee, Department of Physiology/Biophysics 1992-1996
Member, Dean's Task Force on Minority Education, 1994-1998
Member, Dean's Task Force on University Research, 1996-1998
Member, VA Respiratory Therapy Standards Board, 1996-1998.

The Johns Hopkins School of Medicine:
Member, Postdoctoral Program Advisory Board, 1998-Present
Member, Graduate Program in Cellular and Molecular Medicine, Minority/Disability Committee, 1998-Present.
Chair, Search Committee for Director of Hematology Division, 1999.
Member, Search Committee for Physician-in-Chief, Department of Medicine Johns Hopkins Bayview Medical Center. 1999-2000.
Member, Department of Medicine Development Committee, 1999-2003
Member, Intern and Resident Selection Committee, 1999-2003
Member, Young Investigators' Day Award Review Committee, 1999-2000.
Member, David Israel Macht Memorial Research Prize Committee, 1999-2000.
Member, Michael A. Shanoff Research Award Committee, 1999-2000.
Member, Johns Hopkins Medicine Cardiorespiratory Council, 2000-2001.
Member, Goal V Committee, 2001-2004
Member, Search Committee for Director, Translational Research in Lung Cancer, 2001
Member, Search Committee for Director of Division of Allergy and Clinical Immunology, 2002
Member, Diversity Committee, 2002-2005
Chair, Comprehensive Transplant Research Council, 2000-2001
Member, Comprehensive Transplant Center Leadership Council, 2000-2001
Director, Center for Translational Respiratory Medicine, 2002-2005
Member, Environmental Health Sciences Departmental Review Committee, 2002-2003
Chair, T-32 Training Grant Executive Committee
Chair, T-35 Short-term Minority Training Grant Executive Committee (2000-2005)
Member, Emerging Techology Task Force Committee, 2003-2005

University of Chicago
Member, Executive Committee, University Practice Plan
Member, Biological Science Division, Executive Committee
Member, Cancer Center Internal Advisory Board, 2005-present
Member, Research Advisory Committee (RAC) May 2007-2009
Chair, Search Committee: Chief UCMC Quality Officer 2006
Chair, Search Committee: Chair, Department of Surgery 2006
Chair, RAC Imaging Sub-Committee 2007
Member, Urban Health Initiative Steering Group 2006-8
Co-Chair, Search Committee: Chair, Department of Pediatrics 2007

University of Illinois at Chicago
Member, Chancellors Executive Committee, 2010-2012
Board of Governors Argonne National Laboratories, 2010-2012
Member, CCTS Internal Advisory Board 2010-2012
Member, Executive Committee of Chancellors Committtee for Latino Affairs
Member, Deans Council, 2010-2012
Chair, Health Science Center Leadership Council, 2010-2012
Member, Academic Directions Task Force 2010-2012
Chancellor's Committee on the Status of Latinos 2010-2012
Member, Presidents Cabinet 2010-present
Chair, Search Committee for Chairman of Medicine 2010-2011

University of Arizona
Member, Senior Leadership Committee of the President 2013-2016

PROFESSIONAL SOCIETIES:
Association of American Professors (2005)
American Clinical and Climatological Association (2004)
American College of Chest Physicians (1983), Fellow (1985)
American College of Physicians (1980), Fellow (1988)
American Federation for Clinical Research (1985-1998)
American Heart Association (1985), Fellow (1999)
American Lung Association-Indiana (1988)
American Physiologic Society (1992)
American Society for Cell Biology (1998)
American Society for Clinical Investigation (1996)
American Thoracic Society (1980)
Association of Academic Professors (2005)
Central Indiana Society of Occupational Medicine (1988)
Central Society for Clinical Research (1989)
Indiana State Medical Association (1988)
Interurban Clinical Club (2000)
Maryland Thoracic Society (1998)
National Academy of Medicine of the National Academies (2011)
National Board of Medical Examiners Test Committee (1986-1989)
Sigma Xi Research Society (1991)

SOCIETAL AND GOVERNMENT APPOINTMENTS AND LEADERSHIP POSITIONS
American Clinical and Climatological Association (2004- present)
Vice President (2012)

American Federation for Clinical Research (Midwest Section)
- Councilor, 1989 - 1990
- Chairman-Elect, Chairman, Past Chairman, 1990 - 1993

American Federation for Medical Research (National)
- Nominating Committee, 1990-1992
- Section Committee, 1990-1992
- Public Policy Committee, 1990-1995
- Awards Committee, 1991-1995
- Program/Publication Committees, 1991-1995
- Science Education Committee, 1992-1995
- National AFCR Councilor, 1992-1997

American College of Chest Physicians
- Pulmonary Vascular Disease Liaison, 2001-2004
- Health and Science Policy Committee, 2001-2004
- Pulmonary Vascular Network Steering Committee, 2002
- Pulmonary Hypertension Guidelines Panel, 2002-2004

American Heart Association
- Vascular Biology, Basic Science Council and Program Committee, 1993-1995
- Vascular Biology Study Section, 1996-1998
- Member, Cardiopulmonary Resuscitation Review Committee, 2000-2004
- Co-Chair, Cardiopulmonary Resuscitation Review Committee, 2001
- Member, Council on Cardiopulmonary Perioperative Critical Care, 2005-2009
- Fellow, American Heart Association, 2006
- Chair, Program Committee, CardioPulmonary Resuscitation Council, 2009
- Member, Resuscitation Symposium Program Committee, 2008-present
- At Large Member, CardioPulmonary Resuscitation Council, 2009-present

American Lung Association
- Career Investigator and Research Fellowship Review Committee, 1994-1997
- Asthma Research Center Review Committee, 1996
- Program Coordinating Committee, 1996-1998
- Committee for Research Review, 1999-2000

American Thoracic Society
- Member, Program Committee, Assembly on Pulmonary Circulation, 1993-1995; 1997-2000
- Chair-elect, Chair, Program Committee, Assembly on Pulmonary Circulation, 1997-1999
- Member, Executive Committee, Assembly on Pulmonary Circulation, 1999-Present
- Member, Long Range Planning Committee, Assembly on Pulmonary Circulation, 1996-1998, 2002-2004
- Chair, Long Range Planning Committee, Assembly on Pulmonary Circulation, 1999-2002
- Member, Work Group, Assembly on Environmental Occupational Health: "What constitutes an adverse health effect?" 1996-1999
- Member, International Conference Committee, 1998-1999
- Member, Pulmonary and Critical Care Training Committee, 1998-2001
- Member, Research Advocacy Network, 1999-Present
- Member, Work Group, Pulmonary Circulation Assembly, "Treatment and Hazards of Inhaled Nitric Oxide Therapy"
- Member, Grover Conference Organizing Committee
- Member, Research Advocacy Committee, 2002-2004
- Member, Pulmonary Circulation Assembly Planning Committee, 2002-2003
- Member, Working Group "Physician Scientist Career Development", 2002-Present

Member, Search Committee for Editor, American Journal of Respiritory Cell and Molecular Biology, 2002-2003
Member, Board of Directors, 2003-2005
Chair, Pulmonary Circulation Assembly, 2003-2004
Member, Audit and Finance Committee, 2003-2004
Member, 2020 Strategic Planning Committee, 2004-2006
Member, Minority Training and Mentorship, 2000-2008
Member, Pulmonary, Critical Care and Sleep Career Task Force, 2008
Chair, Academic Career subcommittee 2008

Association of Professors of Medicine
Member, APM Physician-Scientist Initiative Conference Planning Committee, 2007

Association for Respiratory Health of Minorities
Executive Board, 1992-1995
Chairman, Constitutional Bylaws Committee, 1992-1995

Central Society for Clinical Research
Long Range Planning Committee, 1992
Secretary/Treasurer, 1995-2002
Vice President, 2002
President-Elect, 2003
President, 2004
Councilor, 2005-2008
Chair, Search Committee, for Editor of Journal Laboratory Clinical Medicine, 2005

Foundation for Sarcoidosis Research Scientific Advisory Board
Member, Board of Directors, 2006-present

Health Effects Institute (Environmental Protection Agency sponsored)
Member, Research Review Committee, 2008-2011

Indiana State Committee on Respiratory Care (Governor-Appointed) (1992-1998)

Indiana State Department of Health, Medical Advisory Board for Tuberculosis, (1993-1996)

National Academies of Science
National Research Council
Member, Committee to review IRIS process, 2012-2013

National Institutes of Health (NIH)
Member, Lung Biology and Pathology (LBPA) Study Section, 1995-1999
Member, ARDS Protocol Review Committee, 1995-1998
Chair, ARDS Protocol Review Committee, 1998-Present
Member, Special Emphasis Panel: Tuberculosis Academic Award, 1994
Member, Special Emphasis Panel: Asthma Academic Award, 1995
Member, Special Emphasis Panel: Sickle Cell Pathobiology, 1996
Member, NHLBI Program Project Review Subcommittee, 1996-1999
Member, K08 and K01 Career Development Award Committee, 2000-2002
Ad hoc Chair, K08 Career Development Award Committee, 2000
Co-chair, Endothelial Workshop, "Phenotypic Differences in Vascular Endothelium", 2000
Chair, SCCOR In Acute Lung Injury Review Committee, 2000
Member, Steering Committee, NHLBI Program in Genomic Applications, 2000-2004
Chair, Data Safety Monitoring Board, Pulmonary Branch, NHLBI, 2000-Present
Member, NHLBI Parent Program Project Review Committee, 2001-2005
Member, Advisory Board Cardiopulmonary Genomics, 2002-Present
Chair, NHLBI Parent PPG Committee, 2003-2005
Member, Proteomics Working Group, 2003
Member, SARS Pulmonary Research Committee, 2003
Member, SCCOR Advisory Group, 2003

Member, Working Group on "Lung Transplant complications", 2004
Member, NHLBI Strategic Planning Committee on Personalized Medicine, 2006
Member, Expert Blue Ribbon Panel on Medical Chemical Countermeasures, 2006
Member, NHLBI Advisory Council, 2007-2010
Member and Discussion Leader, "Genes to Function" Working Group, 2009
Member, Scientific Advisory Committee, NIH Clinical Research Center, 2009-2013
Member, NHLBI Chronic Thromboembolic Pulmonary Hypertension Workshop, 2011
Member, NHLBI Hermansky Pudlak Syndrome Workshop, 2011
Member, NHLBI Sickle Cell Advisory Board, 2012- 2015
Member, External Advisory Panel, NHLBI TOPMed Program 2015-present
Texas State Asbestos Advisory Board, Texas Department of Health (1987 1988)

CONSULTING AGENCIES/INSTITUTIONS

Howard Hughes Medical Institution, 2003-2005
Nebraska Medical Center Tobacco Settlement Biomedical Research Fund, 2003
Tobacco-Related Disease Program, Review Committee State of California, 2001
Spanish Institute of Science: Grants Review Committee, 2004
Gilead Inc. Scientific Advisory Board, 2009-2013
Lovelace Research Institute, Scientific Advisory Board, 2010-present
University of Iowa Board of Regents Healthcare Advisory Board, 2012-2014
American Academic Health Centers, Board of Directors 2016-present
ECFMG, Board of Directors 2016-present

ACADEMIC ADVISORY COMMITTEES

T-32 EAC

University of Alabama Birmingham
Tulane University

NIH R38 Stimulating Access to Research in Residency (StARR)

Tulane University

NIH Clinical Translational Science Award (CTSA) Advisory Board Memberships

University of Oregon Health Science Center, 2007- 2014
University of Colorado Health Science Center, 2007-2017
University of Southern California, 2011- 2014
University of Michigan Health Science Center, 2012-2018

SYMPOSIA OR CONFERENCES ORGANIZED:

1998 American Thoracic Society Annual Meeting, San Francisco, Chairman of Scientific Symposium, "Transmembrane Signaling."
1998 American Federation for Clinical Research, Chicago, IL. Satellite Symposium, "Novel Pathways of Transmembrane Signaling."
1999 American Thoracic Society, International Conference, San Diego, CA. Chair and State of the Art Speaker. Mini-Symposium: "Regulatory Mechanisms of Lung Permeability."
1999 Johns Hopkins University School of Medicine "Update in Pulmonary and Critical Care Medicine" Conference, Santa Fe, NM. Organizer and Speaker.
1999 Johns Hopkins University School of Medicine, "Update in Occupational Lung Disease," Symposium, Baltimore, MD, Organizer and Speaker.
2000 Central Society for Clinical Research, "SNPs, Chips and Functional Genomics," Chicago, IL, Symposium Organizer.

2000 Johns Hopkins University Department of Medicine. "Update in Pulmonary and Critical Care Medicine." CME Symposium: Santa Fe, NM. Organizer and Speaker.
2001 Johns Hopkins University School of Medicine. "First Annual PPG Symposium on Molecular regulation of vascular permeability: Novel mechanisms and therapies. Baltimore, MD. Organizer and Speaker.
2001 American Thoracic Society Meeting, San Francisco Mini Symposium, "Endothelial Injury and Signal Transduction." Chairman and Speaker.
2001 Johns Hopkins University Department of Medicine. "Update in Pulmonary and Critical Care Medicine." CME Symposium: Jackson Hole, WY. Organizer and Speaker.
2001 Central Society for Clinical Research, "Vascular Endothelial Cell Homeostasis—It's a matter of life and death," Chicago, IL. Symposium Organizer and Speaker.
2002 American Thoracic Society, Atlanta, Post-Graduate Course, "SNPs, Chips and Functional Genomics." Co-Chairman and Speaker.
2002 Johns Hopkins University Department of Medicine. Fourth Annual "Update in Pulmonary and Critical Care Medicine." CME Symposium: Santa Fe, New Mexico. Organizer and Speaker.
2002 Central Society for Clinical Research, "Endothelial and Epithelial Cell Boundaries—Implications for Organ Dysfunction and Host Defense. Chicago, IL. Symposium Organizer.
2003 NIH/NHLBI Workshop, "Using functional genomics to understand complex lung disease." American Thoracic Society International Meeting, Seattle, WA.
2004 Gordon Conference, "Endothelial Cell Phenotypes in Health and Disease, Andover, NH. Vice Chair and Speaker.
2004 Sepsis Diagnosis, Pathogenesis and Novel therapies; Course Organizer and Chair, Baltimore, MD.
2005 2nd International Shanghai Conference on Respirology, Shanghai, China. Organizing Committee and Speaker.
2006 Gordon Conference, "Endothelial Cell Phenotypes in Health and Disease, Biddiford, Maine. Chair and Speaker.
2013 Chicago Respiratory Health Disparities Symposium. Organizer and speaker, Chicago IL

INVITED NAMED LECTURESHIPS

The Dr. David Dines Lecture, Mayo Clinic, Scottsdale, AZ, 2000
The Dr. Irving Kass Memorial Lecture, University of Nebraska, NE, 2001
The Dr. David Dines Lecture, Mayo Clinic, Rochester, MN, 2001
The Heinman Lecture, University of California, Davis, CA, 2002
The Simon Rodbard Memorial Lecture, American College of Chest Physicians Convocation Ceremony, San Diego, CA, 2002
The Robert F. Johnston Memorial Lecture, Drexel University/Hahneman School of Medicine, Philadelphia, PA, 2003
The I. Jerome Flance Lecture, Washington University School of Medicine, St. Louis MO, 2004
The James E. Bowman Lecture, University of Chicago, Chicago IL, 2006
The Julius H. Comroe Jr. Distinguished Lecture, American Physiologic Society, San Francisco CA, 2006
The Dickinson Richards Distinguished Lecture, American Heart Association, Chicago IL, 2006
The Roland H. Ingram Jr. Lecture, Emory University, Atlanta GA, 2006
The Neil S. Cherniak Distinguished Lecture, Case Western, Cleveland OH, 2006
The Sunnyside Guild Lecture, Indiana University School of Medicine, Indianapolis IN, 2007
The William N. Kelley Lecture, University of Michigan, Ann Arbor MI, 2008
The Stephen Kurtides Memorial Lecture, Northshore University, Evanston, IL 2009
The Pfizer Medical & Academic Lecture, University of California San Diego, San Diego CA, 2010
The Dr. Johnson McGuire Lecture, University of Cincinnati, Cincinnati, OH, 2010
The Dr. David Deiss Distinguished Lecture, UTMB, Galveston, TX, 2010
Giles F. Filley Lecture, Aspen Lung Conference, Aspen, CO, 2010

Cohn Symposium Distinguished Lecture, Rush University Medical Center, Chicago IL, 2010
Harold F. Dvorak Lecture, Center for Vascular Biology Research, Harvard, Boston, MA, 2010
Branscomb-Briggs Lecture, University of Alabama Birmingham, Birmingham, AL, 2011
John Hickam MD Lecture, Central Society for Clinical Research Annual Meeting, Chicago, IL, 2011
Fessinger-Springer Lecture, College of Science, University of Texas at El Paso, 2011
Robert M Roger Lecture, Department of Medicine, Pittsburgh, PA, 2013
Beckwith Lecture, Brown University, School of Medicine, Providence, RI, 2014
Barney Kully MD Lecture, Cedar Sinai Medical Center, Los Angeles, CA, 2015
Flexner Lecturer, Vanderbilt University, Nashville, TN, 2015
The John B West Distinguished Lecturer, University of California San Diego, San Diego CA, 2019

RECOGNITION: AWARDS AND HONORS:

Public Health/National Health Scholarship Award, 1978-1980
NIH Postdoctoral Fellowship in Physiology, 1984-1985
Fellow-American College of Chest Physicians, 1986
Fellow-American College of Physicians, 1988
Dr. Calvin H. English Investigator of Medicine, Indiana University, 1989-1994
Central Society for Clinical Research, 1989 (elected)
Henry F. Christian Award for Meritorious Research, 1990, 1992
Boehringer-Ingelheim Research Award, Midwest AFCR, 1991
Dr. Calvin H. English Professor of Medicine, Indiana University, 1994-1998
Physician Community Service Award, Indiana State Medical Association, 1994
Otis R. Bowen Award for Community Service - Indianapolis Medical Society, 1994
NIH Lung Biology and Pathology Study Section, Member, 1995-1999
American Society for Clinical Investigation, 1996 (elected)
Dr. David Marine Professor of Medicine, Johns Hopkins University, 1999-2005
David M. Levine Excellence in Mentoring Award, Johns Hopkins University, 2002
Interurban Clinical Club, 2000-2005 (elected)
American Thoracic Society, Distinguished Scientist Award, Seattle, WA, 2003
Honorary AOA Membership- University of Texas Southwestern Medical School, Dallas, TX, 2004
American Clinical and Climatologic Society, 2004 (elected)
Association of American Professors (AAP), 2005 (elected)
Dr. Lowell Coggeshall Professor of Medicine, University of Chicago 2005-2010
Chair & Vice Chair -Gordon Research Conference, 2006 & 2008
W. J. Youden Award in Interlaboratory Testing (Microarray Platforms, *Nature Methods* 2005) 2007
NHLBI Advisory Council, 2007-2010
Association of Professors of Medicine- Diversity Award for Innovation in Medicine, 2009
Earl M. Bane Professor of Medicine, University of Illinois Chicago 2011-2013
National Academy of Medicine of the National Academies- elected 2011
Chicago Healthcare Executive Forum for UI Health System Initiatives, 2012
Leadership Awards, Chicago Hispanic Physicians Association, 2012
Maestro de Campo Award from Chicago's Latino Caucus, 2012
Dr. Merlin DuVal Professor of Medicine, University of Arizona, 2014-present
ATS Pulmonary Circulation Assembly Leadership Award, 2015
La Estrella Award, from the Tucson Hispanic Chamber of Commerce, 2015
ATS Trudeau Medal Award, American Thoracic Society, 2015

INVITED TALKS - NATIONAL (since 2010)

2010 - Pfizer Academic Partnership Visiting Professorship, U. California San Diego, San Diego, CA
- Dr David Deiss Distinguished Lecture, U. Texas Medical Branch Alumni Meeting, Galveston, TX
- The Johnson McGuire Visiting Professorship, University of Cincinnati, Cincinatti, OH

- Washington University – K12 Visiting Distinguished Scholar Series, St. Louis, MO
- European Respiratory Society, State of the Art Lecturer, Lisbon, Portugal
- 50th Japanese Thoracic Society, State of the Art Plenary Speaker, Kyoto, Japan
- Cohn Symposium Keynote Speaker, Rush University Medicial Center, Chicago, IL
- ATS Featured Speaker, Sphingolipids and the Pulmonary Circulation, New Orleans, LA
- ATS Featured Speaker, Genetics of Lung Injury and Repair, New Orleans, LA
- International Drug Discovery Institute 1st Symposium, Invited Speaker, Sienna, Italy
- Giles Filley Lecture, Aspen Lung Conference, Aspen, CO
- Pulmonary Hypertension Association Annual Meeting, Featured Speaker, Orange, CA
- Harold F. Dvorak Plenary Lecture, Center for Vascular Biology Research, Beth Israel Hospital and Harvard Medical School, Boston, MA
- Emory University Department of Medicine Research Day, Featured Speaker, Atlanta, Georgia
- Medical College of Georgia, Vascular Biology Center Retreat, Featured Speaker, Augusta GA
- Davis Heart Lung Research Institute Research Day, Ohio State University, Columbus, OH
- AHA, Plenary Speaker Cardiopulmonary Genomics Symposia, Chicago, IL
- Cleveland Clinic Foundation-Featured Speaker-Respiratory Institute Research Day, Cleveland, OH
- Oregon Health Science Center-DOM Grand Rounds, Distinguished Scholar Series, Portland, OR

2011
- Rush University, Grand Rounds, Chicago, IL
- University of Iowa, Dept of Medicine Research Day Speaker & Grand Rounds, Iowa City, IA
- University of California, San Francisco, Pulmonary Research Conference, San Francisco, CA
- Experimental Biology Meeting, Plenary Speaker, Washington, DC
- Branscomb-Briggs Lecture, University of Alabama Birmingham, Birmingham, AL
- John Hickam MD Lecture, Central Society for Clinical Research Annual Meeting, Chicago, IL
- Fessinger-Springer Lecture, College of Science, University of Texas at El Paso, El Paso, TX
- ATS Featured Speaker, Career Advice Postgraduate Course, Denver, CO
- NCI/NHLBI Centers for Population Health and Health Disparities, Chicago, IL
- NIH Workshop on PE and CTEPH, Personalized Medicine, Bethesda, MD
- FASEB Sphingolipid Symposia, Lucca, Italy
- NIH Workshop on Hermansky-Pudlak Syndrome, Bethesda, MD
- Microcirculation International, State of the Art Speaker, Munich, Germany
- Sixteenth Congress of the Asian Pacific Society of Respirology (APSR), Shanghai, China
- 2nd Annual Soochow University International Clinical Forum, Suzhou, China
- Pittsburgh Lung Conference, Plenary Speaker, Pittsburgh, PA
- Eli Lilly Co., Translational Research Seminar Series, Indianapolis, IN
- Illinois Legislative Latino Caucus Foundation, Healthcare Panel, Chicago, IL

2012
- University of California at Merced, San Joaquin Valley Seminar Series, Merced, CA
- Baxter Healthcare Corporation, Latinos at Baxter Conference, Chicago, IL
- University of Texas Medical Branch, Biological Chemistry Student Organization, Galveston, TX
- Keynote speaker for University of Michigan, CTSA Annual Symosium, Ann Arbor, MI
- Christ Advocate Medical Center Department of Internal Medicine Grand Rounds, Chicago, IL
- 4th Latino Medical Student Association, keynote speaker, Chicago, IL
- 1st International Conference in Regenerative Lung Medicine, Marburg, Germany
- European Respiratory Society, State of the Art Lecturer, Vienna, Austria
- Illinois Legislative Latino Caucus Foundation, Healthcare Panel speaker, Rosemont, IL
- Freiburg Translational Symposium, Freiburg, Germany
- ATS Featured Speaker, Career Advice Postgraduate Course, San Francisco, CA
- Edgars Fellow Program, Future of Healthcare, Urbana, IL
- American Associaton of Academic Leaders, Plenary preseantation, Phoenix, AZ
- Future of Translational Research in AMCs, Creighton Alegent Health, Omaha, NE

2013
- Seeing at Nanoscale, Northwestern University, Evanston, IL
- ATS Featured Speaker, Philadelphia, PA

- Robert M Roger Lecture, Department of Medicine, Pittsburgh, PA
- American Society of Artificial Organs, Annual Meeting, Plenary presentation, Chicago, IL
- Stanford University, Dept of Medicine Grand Rounds & Research Day Speaker, Palo Alto, CA
- ATS Featured Speaker, Career Advice Postgraduate Course, Philadelphia, PA
- University of Illinois Dept of Medicine Research Day Plenary Speaker, Chicago, IL
- International Union of Physiologic Societies, State of the Art Speaker, Birmingham, UK
- University South Alabama, Grand Rounds & College of Medicine Research Day, Mobile, AL
- University of Louisville, Dept of Medicine Grand Rounds, Research Day Plenary Speaker, KY
- Arizona Thoracic Society, Plenary Speaker, Tucson, AZ

2014
- Beckwith Lecture, Brown University, School of Medicine, Provdence, RI
- UCLA Pulmonary Grand Rounds, Los Angeles, CA
- 64th AMSA Convention, American Medical Student Association, New Orleans, LA
- Arizona State University, BioDesign Lecture Series, Phoenix, AZ
- ATS Featured Speaker, Mechanosensing, San Diego, CA
- ATS Featured Speaker, Vascular Barrier Regulation, San Diego, CA
- International Vascular Biology Meeting Symposium "Vascular Barrier Function" Kyoto, Japan
- Medical University of South Carolina, DOM Grand Rounds, Charleston, SC
- Medical University of South Carolina, PCCM Grand Rounds, Charleston, SC
- Weill Cornell Medical College, DOM Grand Rounds, New York City, NY

2015
- Cedar Sinai, Barney Kully MD Lecture, Los Angeles, CA
- Cedar Sinai, Pulmonary Grand Rounds, Los Angeles, CA
- UCSD Bioengineering Seminar, La Jolla, CA
- ATS Featured Speaker, Genetics of Mechanosensing, Denver, CO
- ATS Featured Speaker, Gene Expression in Carbon Monoxide subjects, Denver, CO
- ATS Health Disparities Symposium speaker, Denver, CO
- University of Nebraska, DOM Grand Rounds, Omaha, NE
- Plenary Speaker Denmark Institute for Health, Copenhagen University, Copenhagen, Denmark
- International Society for Critical Care, Plenary Session Speaker, Seoul, Korea
- Sanford Imagentix Genomic Symposium, Sioux Falls, South Dakota
- UC Davis Pharmacology Seminar, Davis, CA
- Vanderbilt University Flexner Lecturer, Nashville, TN

2016
- ATS Trudeau Lecture, San Francisco, CA
- Plenary Speaker, Beijing University of Chinese Medicine 60th Anniversary, Beijing, China

2017
-Virginia Commonwealth University, DOM Grand Rounds, Richmond VA
-University of Alabama Birmingham, DOM Grand Rounds, Birmingham AL
-Foundation for Sarcoidosis Research Symposium, Phoenix, AZ
-Feinstein Insitute of Medical Research, Manhasset, NY
-Twentieth Congress of the Asian Pacific Society of Respirology (APSR), Shanghai, China
-Tufts University Symposium on Pulmonary Hypertension, Boston, MA
- Fort Sam Houston Institute for Surgical Research, San Antonio TX
- ASAIO Annual Meeting, Chicago IL

2018
- Plenary Speaker, Scientic Conference, Guangzhou Medical University, Guangzhou, China
- JP Morgan Biotechnology Conference, San Francisco, CA
- Texas Tech University Health Sciences, El Paso, TX
- Plenary Speaker, Guangzhou University 60th Anniversary, Guangzhou, China
- UC Davis Genetic and Genomic Seminar, Davis, CA
- USC Medicine Grand Rounds, Los Angeles, CA
- University of Kansas Plenary Lecture Faculty Rereat, Kansas City, KA

2019
- A Trans-Agency Workshop on the Pathophysiology of Radiation-Induced Lung Injury-NIAID, BARDA, FDA- Washington, DC
- University of Kentucky, Physiology Seminar Series, Lexington, KY

- Plenary Speaker, Beijing University, Beijing, China
- Plenary Speaker, Pulmonary Hypertension Symposium, Guangzhou Medical University, Guangzhou, China

2020/2021 (limited by the SARS-CoV2 Pandemic)
- Ono Pharmaceutical via ZOOM
- UCLA CTSI Distinguished Seminar Series via ZOOM
- Tulane Univeristy Department of Medicine Grand Rounds via ZOOM
- ATS International Meeting Presidential Symposium "Can racial and ethnic disparities in respiratory health be eliminated?"via ZOOM
- Houston Methodist Critical Care Institute: Department of Imaging Medicine Grand Round. Houston TX
- ARDS Summit: Plenary Speaker via ZOOM
- Anti-Fibrotic Therapy Summit: Plenary Speaker via ZOOM

2022 - JP Morgan Biotechnology Conference, San Francisco, CA
- A Trans-Agency Workshop on the Pathophysiology of Radiation-and Chemical-Induced Lung Injury-NIAID, BARDA, FDA- Washington, DC
- ATS International Meeting Lung Endothelial cel Phenotypes 2022 "Endothelium as Immune Effectors". San Francisco, CA
-Houston Methodist Cancer Center Theranostics Symposium. Houston TX
- A Trans-Agency Workshop on the Pathophysiology of Chemical-Induced Lung Injury-NIAID, BARDA, FDA- Research Triangle, NC
- Plenary Speaker, Innate Immunity of the Lung Symposium, Berlin, Germany

2023 - JP Morgan Biotechnology Conference, San Francisco, CA
- Yale University- 'Internal Medicine Grand Rounds' and 'Inspiration Lecture', New Haven, CT

INVITED LECTURES – INTERNATIONAL

1991 Georgia Institute of Technology, Asbestos in Health and Disease, Frankfurt, Germany
1991 Hôpital Calmette, Visiting Professor, Lille, France
1994 Fourth Biennial Meeting on Blood Coagulation and Platelet Biology, Megeve, France
1996 Third Annual Franz Volhard Symposium, Berlin, Germany
1997 31st Penner Coagulation Conference, Sophia, Bulgaria
2000 NATO Advanced Study Institute, Etiology and Treatment of Acute Lung Injury, Corfu, Greece
2001 EuroConference on Chronic Lung Disease, Institût Pasteur EuroConferences, Paris, France
2001 McGill University, Dr. Dorothy Wiselberg Symposium on Acute Lung Injury, Montreal, Canada
2001 Second European Meeting on Vascular Biology, European Society of Cardiology, Ulm, Germany
2002 University of Toronto and Toronto General Hospital, Visiting Professor, Toronto, Canada
2002 Seventh Congress of the Asian Pacific Society of Respirology (APSR), Taipei, Taiwan
2003 Sixth Endotheliome Conference, Otaru, Japan
2004 Barbados/Hopkins Symposium on Complex Lung Disease, Christ's Church, Barbados, UK
2004 1st International Sphingolipid Symposium, Sapporo, Japan
2004 13th Panhellenic Congress on Lung Diseases, Patras, Greece
2005 Update in Respiratory Disease Management, Dublin, Ireland
2005 NATO Advanced Study Institute, Knossos. Crete, Greece
2005 2nd International Shanghai Conference on Respirology, Shanghai, China
2005 Visiting Professor, Liaocheng Hospital, Liaocheng, China
2006 Visiting Professor, Soorya Hospital, Chennai, India
2006 Univeristy of Dublin, Mater Hospital, Dublin, Ireland
2008 European Respiratory Society, State of the Art Lecturer, Lisbon, Portugal
2008 FASEB Sphingolipid Symposia, Sussex, England
2009 Philippine Thoracic Society, State of the Art Plenary Speaker, Manila, Philippines

2010 European Respiratory Society, State of the Art Lecturer, Lisbon, Portugal
2010 50th Japanese Thoracic Society, State of the Art Plenary Speaker, Kyoto, Japan
2010 International Drug Discovery Institute 1st Symposium, Invited Speaker, Sienna, Italy
2011 FASEB Sphingolipid Symposia, Lucca, Italy
2011 Microcirculation International, State of the Art Speaker, Munich, Germany
2011 Novartis Global Respiratory Institute, Horsham, United Kingdom
2011 Sixteenth Congress of the Asian Pacific Society of Respirology (APSR), Shanghai, China
2011 2nd Annual Soochow University International Clinical Forum, Suzhou, China
2012 1st International conference in Regenerative Lung Medicine, Marburg, Germany
2012 European Respiratory Society, State of the Art Lecturer, Vienna, Austria
2012 Freiburg Translational Symposium in Inflammation, Freiburg, Germany
2013 International Union of Physiologic Societies, State of the Art Speaker, Birmingham, United Kingdom
2014 International Vascular Biology Meeting Symposium "Vascular Barrier Function", Kyoto, Japan
2015 Plenary Speaker, Denmark Institute for Health, Copenhagen, Denmark
2015 International Society for Critical Care, Plenary Session Speaker, Seoul, Korea
2016 Beijing University of Chinese Medicine, Plenary Speaker, 60th Anniversary, Beijing, China
2017 Gennova Biopharmaceutical Inc., Pune, India
2017 Fudan University, Center for Respirology, Shanghai, China
2017 Twentieth Congress of the Asian Pacific Society of Respirology (APSR), Shanghai, China
2018 Plenary Speaker, Scientic Conference, Guangzhou Medical University, Guangzhou, China
2018 Plenary Speaker, Guangzhou University 60th Anniversary, Guangzhou, China
2019 Plenary Speaker, Pulmonary Hypertension Symposium, Guangzhou, China
2019 Plenary Speaker, Beijing University, Beijing, China
2022 Plenary Speaker, Innate Immunity of the Lung, Berlin, Germany