

CURRICULUM VITAE

Name: Stavros Garantziotis, MD

Address: 3620 Sweeten Creek Rd.
Chapel Hill, NC 27514

Marital status: Married, to Sylvia Fernandes de Castro Costa, two children

Date and place of birth: 3/1/1971, Athens, Greece

Citizenship: US and Greek

US Visa Status: Citizen

Medical School, US equivalency:

1988-1994 Albert-Ludwigs-University, Freiburg, Germany (MD)

1995 Parts 1 and 2 of the USMLE

1998 Part 3 of the USMLE

Doctoral Thesis:

Hemoglobin Concentration Correlates with the Severity of Cerebral Vasospasm after Subarachnoid Hemorrhage. Albert-Ludwigs-University, Freiburg, Germany, 1993

Postgraduate education:

2/1995-6/1996 Internship in Internal Medicine, Ludwig-Maximilians-University Hospital, Munich, Germany

7/1996-6/1999 Internship and Residency in Internal Medicine, East Campus Program, Albert Einstein College of Medicine, Bronx, NY

7/1999-6/2000, } Fellowship in Pulmonary-Critical Care Medicine, Duke University
8/2002-8/2004 } Medical Center, Durham, NC

Extracurricular activities:

10/2000-5/2002 Mandatory military service, Ground Forces Medical Corps, Greece

Professional activities:

8/2004-8/2007 Clinical Instructor, Division of Pulmonary, Allergy and Critical Care Medicine, Duke University Medical Center, Durham, NC

8/2007-current Staff Clinician, Medical Director, Clinical Research Unit, National Institute of Environmental Health Sciences, NIH, HHS

2/2008-current Adjunct Assistant Professor of Medicine, Division of Pulmonary and Critical Care Medicine, University of North Carolina at Chapel Hill

2/2008-current Attending, Durham VA Medical Center

3/2011-current Adjunct Associate Professor of Medicine, Duke University Medical Center

2/2013-8/2016 Acting Director, Clinical Research Program, National Institute of Environmental Health Sciences, NIH, HHS

Specialty certifications and recertifications:

1999, 2009 Internal Medicine (American Board of Internal Medicine)

2003, 2013 Pulmonary Medicine (American Board of Internal Medicine)

2005, 2015 Critical Care Medicine (American Board of Internal Medicine)

Awards/Societies:

Member- American Thoracic Society, American College of Chest Physicians

Medical License- Federal Republic of Germany

Medical License- North Carolina Medical Board

Leo M. Davidoff Society of the Albert Einstein College of Medicine: Certificate of Distinction for outstanding Achievement as a House Officer in the Teaching of Medical Students, 1997, 1998, 1999. Honorary Induction as Member, 1999

2010 NIEHS Director's Merit Award

2013 NIEHS Director's Merit Award

2016 NIH Director's Merit Award

Peer Review Activities:

Editorial Board: American Journal of Respiratory Cell and Molecular Biology
American Journal of Physiology – Lung Cellular and Molecular Physiology
PLoS One

Ad hoc (selected, in alphabetical order):

American Journal of Respiratory and Critical Care Medicine

American Journal of Transplantation

Biochemical Pharmacology

Archives of Environmental Contamination and Toxicology

Chest

Critical Care Medicine

Glycobiology

JAMA

Journal of Clinical Investigation

Journal of Infectious Diseases

PLoS ONE

Panamerican Review of Public Health

Respiration

Scottish Medical Research Council

Swiss Medical Journal

Member, Meeting Planning Committee, American Thoracic Society, Assembly for Allergy, Immunology and Inflammation

Member, Planning Committee, 9th International Conference on Hyaluronan, June 2013

Member, Planning Committee, 10th International Conference on Hyaluronan, June 2015

Invited Speaker:

1. Contributions in Transplantation 2006 – Barcelona, Spain, April 2006. Title: Innate immunity promotes lung transplant rejection after environmental injury
2. American Thoracic Society International Conference, San Francisco, CA, May 2007, Sunrise Seminar. Title: The Role of Lung Transplant in the Management of Patients with Idiopathic Pulmonary Fibrosis
3. National Cancer Institute, Laboratory of Cell and Cancer Biology Research Talk, Gaithersburg, MD, September 2007. Title: Inter-alpha-trypsin inhibitor and extracellular matrix: a tale of many interactions.
4. Brown University Pathobiology Graduate Program Seminar Series. Providence, RI, January 29, 2009. Title: Matrix revisited: the role of inter-alpha-inhibitor proteins in lung injury.
5. East Carolina University, Greenville, NC, December 17, 2009. Title: Hyaluronan role in the development of airway hyperresponsiveness.

6. Aichi Medical University, Nagoya, Japan – June 2010. Title: Hyaluronan binding blockade abolishes airway hyperresponsiveness in murine models of asthma.
7. 8th International Hyaluronan Symposium, Kyoto, Japan – June 2010: Title: Cell stretch induces epithelial to mesenchymal transition in alveolar epithelia through hyaluronan activation of innate immunity
8. 2010 NIH research festival (October 2010), Bethesda, MD: Title: Hyaluronan in asthma – a new therapeutic target?
9. University of Alabama at Birmingham, January 2011, Birmingham, AL: Title: Hyaluronan role in the development of airway hyperresponsiveness.
10. American Thoracic Society International Conference, Denver, CO, May 2011: Title: Cell stretch induces epithelial to mesenchymal transition in alveolar epithelia through hyaluronan activation of innate immunity
11. NIH Grand Rounds, February 2012: Environmental injury reprograms hyaluronan interactions with innate immunity: a final common pathway to airway disease
12. 9th International Conference on Hyaluronan, Oklahoma City, June 2013. Title: Hyaluronan in asthma – a therapeutic target.
13. UNC Eschelman School of Pharmacy, October 2013. Title: Translational Research In the NIEHS Clinical Research Unit: Effects of Nano-sized cerium dioxide on human immune and airway cells.
14. Cleveland Clinic Department of Pathobiology, April 1, 2014. Title: Mechanistic insights into hyaluronan-mediated airway hyperresponsiveness.
15. European Respiratory Society Annual meeting, September 6-10, 2014 Munich, Germany. Title: Hyaluronan: role and function in the respiratory tract
16. East Carolina University, Greenville NC, Fall 2014. Title: Hyaluronan signaling in environmental airway disease
17. 10th International Conference on Hyaluronan, Florence, Italy, June 9, 2015. Title: Hyaluronan signaling in airway disease.
18. Ohio State University, August 10, 2015. Title: Hyaluronan-Innate Immune Signaling in Environmental Airway Disease
19. Cleveland Clinic, August 27, 2015. Title: Hyaluronan-Innate Immune Signaling in Environmental Airway Disease
20. Case Western University, August 28, 2015. A) Title: Hyaluronan-Innate Immune Signaling in Environmental Airway Disease. B) Title: Building a successful Translational Research Program in Pulmonary Disease
21. University of Alabama, Birmingham, Department of Anesthesiology, December 22, 2015. Title: Cell-matrix interactions in lung injury: role of TLR5 and primary cilia.
22. National Jewish Division of Pulmonary and Critical Care Medicine. April 13, 2016. Title: Role of TLR5 in environmental lung injury and human lung disease.
23. University of Alabama, Birmingham, Division of Pulmonary, Allergy and Critical Care Medicine Grand Rounds, November 16, 2016. Title: Role of primary cilia in airway remodeling

Original Publications:

1. **Garantziotis S**, Howell DN, McAdams HP, Davis RD, Henshaw NG, Palmer SM. Influenza pneumonia in lung transplant recipients: clinical features and association with bronchiolitis obliterans syndrome. *Chest* 2001; 119: 1277-80
2. **Garantziotis S**, Bhalla KS, Long GD, Vredenburg JJ, Folz RJ. Fatal re-expansion pulmonary edema associated with increase lung IL-8 levels following high-dose chemotherapy and autologous stem-cell transplant. *Respiration* 2002; 69: 351-354
3. Wencker D, Chandra M, Nguyen K, Miao W, **Garantziotis S**, et al. A mechanistic role for cardiac myocyte apoptosis in heart failure. *J Clin Invest.* 2003; 111(10):1497-504.

4. Tilkeridis C, Bei T, **Garantziotis S**, Stratakis CA. Association of a COL1A1 polymorphism with lumbar disc disease in young military recruits. *J Med Genet* 2005; 42:e44
5. **Garantziotis S**, Brass DM, Savov J, Hollingsworth JW, McElvania-Tekippe E, et al. Leukocyte-derived Interleukin-10 Reduces Subepithelial Fibrosis Associated with Chronically Inhaled Endotoxin. *Am J Respir Cell Mol Biol*. 2006; 35: 662-667
6. Brass DM, Hollingsworth JW, McElvania-Tekippe E, **Garantziotis S**, Hossain I, Schwartz DA. CD14 is an essential mediator of LPS induced airway disease. *Am J Physiol Lung Cell Mol Physiol*. 2007 293(1):L77-83
7. Hollingsworth JW, Li Z, Brass DM, **Garantziotis S**, Timberlake SH, Kim A, Hossain I, Savani RC, Schwartz DA. CD44 regulates macrophage recruitment to the lung in lipopolysaccharide-induced airway disease. *Am J Respir Cell Mol Biol* 2007;37(2):248-53
8. **Garantziotis S**, Hollingsworth JW, Ghanayem R, Timberlake S, Zhuo L, Kimata K, Schwartz DA. Inter-alpha-trypsin inhibitor blocks complement activation and attenuates complement-induced lung injury. *J Immunol* 2007; 179(6):4187-92
9. Hollingsworth JW, Maruoka S, Li Z, Potts EN, Brass DM, **Garantziotis S**, Fong A, Foster WM, Schwartz DA. Ambient ozone primes pulmonary innate immunity in mice. *J Immunol*. 2007;179(7):4367-75.
10. Reams BD, Musselwhite LW, Zaas DW, Steele MP, **Garantziotis S**, Eu PC, Snyder LD, Curl J, Lin SS, Davis RD, Palmer SM. Alemtuzumab in the treatment of refractory acute rejection and bronchiolitis obliterans syndrome after human lung transplantation. *Am J Transplant* 2007;7(12):2802-8
11. **Garantziotis S**, Palmer SM, Ganous T, Chen BJ, Wang T, et al. Innate immunity regulates the development of alloimmune lung injury. *Transplantation* 2007; 84:1012-1019
12. Marraccini P, Brass DM, Hollingsworth JW, Maruoka S, **Garantziotis S**, Schwartz DA. Bakery flour dust exposure enhances non-allergic and allergic airway inflammation in mice *Clin Exp Allergy*. 2008 Sep;38(9):1526-35.
13. Li Z, **Garantziotis S**, Jia W, Potts E, Liu Z, Foster WM, He Y, Hollingsworth JW. The extracellular matrix protein mindin regulates trafficking of murine eosinophils into the airspace *J Leukoc Biol*. 2009 Jan; 85(1):124-31.
14. **Garantziotis S**, Zudaire E, Trempus CS, Hollingsworth JW, Jiang D, Lancaster LH, et al. Serum inter- α -trypsin inhibitor and matrix hyaluronan promote angiogenesis in fibrotic lung injury. *Am J Respir Crit Care Med*. 2008 Nov 1;178(9):939-47 **(cover feature)**
15. Bei T, Tilkeridis C, **Garantziotis S**, Boikos SA, Kazakos K, Simopoulos K, Stratakis CA. A COL1A1 polymorphism is not associated with lumbar disk disease (LDD) in young male Greek army recruits. *Hormones (Athens)*. 2008 Jul-Sep;7(3):251-4
16. Boon K, Tomfohr JK, Bailey N, **Garantziotis S**, Li Z, Brass DM, Maruoka S, Hollingsworth JW, Schwartz DA. Evaluating genome-wide DNA methylation changes in mice by Methylation Specific Digital Karyotyping. *BMC Genomics*. 2008 Dec 11;9:598
17. **Garantziotis S**, Li Z, Potts EN, Kimata K, Zhuo L, Morgan DL, Savani RC, Noble PW, Foster WM, Schwartz DA, Hollingsworth JW. Hyaluronan mediates ozone-induced airway hyperresponsiveness in mice. *J Biol Chem*. 2009 Apr 24;284(17):11309-17
18. Adair JE, Stober V, Sobhany M, Zhuo L, Roberts JD, Negishi M, Kimata K, and **Garantziotis S**. Inter- α -trypsin inhibitor promotes bronchial epithelial repair after injury through vitronectin binding. *J Biol Chem*. 2009; 284(25):16922-30
19. **Garantziotis S**, Li Z, Potts EN, Timberlake S, Foster WM, Schwartz DA, and Hollingsworth JW. TLR4 is necessary for hyaluronan-mediated airway hyperresponsiveness after ozone inhalation. *Am J Respir Crit Care Med*. 2010 Apr 1;181(7):666-75. **(cover feature)**
20. Martinu T, Kinnier CV, Gowdy K, Kelly FL, Snyder LD, Jiang D, Foster WM, **Garantziotis S**, Belperio JA, Noble PW, Palmer SM. Innate immune activation potentiates alloimmune lung disease independent of CXCR3. *J Heart Lung Transplant*, 2011 Jun;30(6):717-25.

21. Heise RL, Stober VP, Cheluvaraju C, Hollingsworth JW, and **Garantziotis S**. Mechanical stretch induces epithelial to mesenchymal transition in alveolar type II epithelium through hyaluronan activation of innate immunity. *J Biol Chem* 2011 May 20;286(20):17435-44.
22. Menendez D, Shatz M, Smoak C, **Garantziotis S**, Fessler MB and Resnick MR. The human toll-like receptor family is integrated into the DNA damage and p53 response network. *PLoS Genetics* 2011 Mar;7(3):e1001360.
23. Seibold MA, Wise AL, Speer MC, Steele MP, Brown KK, Loyd JE, Fingerlin TE, Weiming Z, Gudmundsson G, Groshong SD, Evans CM, **Garantziotis S**, Adler KB, Dickey BF, et al. A common polymorphism in the promoter of *MUC5B* is associated with familial interstitial pneumonia (FIP) and idiopathic pulmonary fibrosis (IPF). *New Engl J Med* 2011 Apr 21;364(16):1503-12
24. Rangelova K, Rice AB, **Garantziotis S**, Mason RP. Formation of Reactive Sulfite-Derived Free Radicals by the Activation of Human Neutrophils. An ESR Study. *Free Radic Biol Med*. 2012 Apr 15;52(8):1264-71
25. Li Z, Potts EN, **Garantziotis S**, Foster WM, Hollingsworth JW. Hyaluronan signaling during ozone-induced lung injury requires TLR4, MyD88, and TIRAP. *PLoS One*. 2011;6(11):e27137
26. Hussain S, Al-Nsour F, Rice AB, Marshburn J, Ji Z, Zink JI, Yingling B, Walker NJ, and **Garantziotis S**. Cerium dioxide nanoparticles do not modulate the lipopolysaccharide-induced inflammatory response of human monocytes. *Int J Nanomedicine*. 2012;7:1387-97 PMID: 22457596. PMCID: PMC3310407
27. Hussain S, Al-Nsour F, Rice AB, Marshburn J, Ji Z, Zink JI, Yingling B, Walker NJ, and **Garantziotis S**. Cerium dioxide nanoparticles induce apoptosis and autophagy in human peripheral blood monocytes. *ACS Nano*. 2012 Jul 24;6(7):5820-9. PMID: 2271232 PMCID: PMC4582414
28. **Garantziotis S**. Modulation of plasma complement by the initial dose of epirubicin/docetaxel therapy in breast cancer and its predictive value. *Br J Cancer*. 2011 Feb 1;104(3):542; author reply 543-4
29. Chulada PC, Vainorius E, **Garantziotis S**, Burch LH, Blackshear PJ, Zeldin DC. The Environmental Polymorphism Registry - a Unique Resource that Facilitates Translational Research of Environmental Disease. *Environ Health Perspect*. 2011;119(11):1523-7
30. Portal-Nuñez S, Shankavaram U, Rao M, Datrice N, Scott A, Aparicio M, Camphausen KA, Fernández-Salguero PM, Chang H, Lin P, Schrupp DS, **Garantziotis S**, Cuttitta F, Zudaire E. Aryl hydrocarbon receptor-induced adrenomedullin mediates cigarette smoke carcinogenicity in humans and mice. *Cancer Res* 2012;72(22):5790-5800
31. Wilson RH, Maruoka S, Whitehead GS, Foley JF, Flake GP, Sever ML, Zeldin DC, Kraft M, **Garantziotis S**, Nakano H, Cook DN. The TLR5 ligand, flagellin, promotes asthma by priming allergic responses to indoor allergens. *Nat Medicine* 2012;18(11):1705-10
32. Rangelova K, Rice AB, Lardinois OM, Triquigneaux M, Steinckwich N, Deterding LJ, **Garantziotis S**, Mason RP. Sulfite-mediated oxidation of myeloperoxidase to a free radical: immuno-spin trapping detection in human neutrophils. *Free Radic Biol Med*. 2013 Jan 29. [Epub ahead of print]
33. Schug TT, Johnson AF, Balshaw DM, **Garantziotis S**, Walker NJ, Weis C, Nadadur SS, Birnbaum LS. ONE Nano: NIEHS's Strategic Initiative on the Health and Safety Effects of Engineered Nanomaterials. *Environ Health Perspect*. 2013 Apr;121(4):410-4. PMID 23407114 PMCID: PMC3620765
34. Pu D, **Garantziotis S**, Mostafa J. Anonymous Record Linkage Between EPR and CDW-H: Toward Development of a Federated Genotype-Phenotype System. *AMIA Summits Transl Sci Proc*. 2013 Mar 18;2013:143-146. PMID: 24303325
35. Kang HS, Liao G, DeGraff LM, Gerrish K, Bortner CD, **Garantziotis S**, Jetten AM. CD44 plays a critical role in regulating diet-induced adipose inflammation, hepatic steatosis, and insulin resistance. *PLOS One*. 2013;8(3):e58417

36. Li H, Edin ML, J. Bradbury A, Graves JP, DeGraff LM, Gruzdev A, Cheng J, Dackor RT, Wang PM, Bortner CD, **Garantziotis S**, Jetten AM, Zeldin DC. COX-2 inhibits Th9 differentiation during allergic lung inflammation via downregulation of IL-17RB. *Am J Resp Crit Care Med* 2013 Feb 28. [Epub ahead of print]
37. Martinu T, Kinnier CV, Sun J, Kelly FL, Nelson M, **Garantziotis S**, Foster WM, Palmer SM. Allogeneic splenocyte transfer and lipopolysaccharide inhalations induce differential T cell expansion and lung injury: A novel model of pulmonary graft-versus-host disease. *PLoS One*. 2014 May 20;9(5):e97951. PMID: 24844383
38. Stober VP, Szczesniak C, Childress Q, Heise RL, Bortner CD, Hollingsworth JW, Neuringer IP, Palmer SM, **Garantziotis S**. Bronchial Epithelial Injury in the Context of Alloimmunity Promotes Lymphocytic Bronchiolitis through Hyaluronan Expression. *Am J Physiol Lung Cell Mol Physiol* 2014. PMID: 24748604
39. Lowe JM, Menendez D, Bushel PR, Shatz M, Kirk EL, Troester MA, **Garantziotis S**, Fessler MB, Resnick MA. p53 and NF- κ B Co-regulate Pro-inflammatory Gene Responses in Human Macrophages. *Cancer Res*. 2014 Apr 15;74(8):2182-92. PMID: 24737129
40. Lazrak A, Jurkuvenaite A, Ness EC, Zhang S, Woodworth BA, Muhlebach MS, Stober VP, Lim YP, **Garantziotis S***, Matalon S*(*equal contribution as senior authors). Inter- α -Inhibitor Blocks ENaC Activation and Decreases Nasal Potential Differences in Δ F508 Mice. *Am J Respir Cell Mol Biol*. 2014 May;50(5):953-62. PMID: 24303840
41. Hussain S, Sangtian S, Snyder RJ, Marshburn M, Rice AB, Walker NJ, Bonner JC, **Garantziotis S**. Multi-walled Carbon Nanotubes Induce Pyroptosis and Inflammasome Activation in Primary Human Bronchial Epithelial Cells. *Particle and Fibre Toxicology* 2014 Jun 10;11:28. PMID: 24915862; PMCID: PMC4067690.
42. Hoffman K, Fang M, Horman B, Patisaul HB, **Garantziotis S**, Birnbaum LS, Stapleton HM. Urinary Tetrabromobenzoic Acid (TBBA) as a Biomarker of Exposure to the Flame Retardant Mixture Firemaster[®] 550. *Environ Health Perspect*. 2015 Feb;123(2):160-5. PMCID: PMC4314253
43. Snyder RJ, Hussain D, Wine R, Rice A, **Garantziotis S**. Multi-Walled Carbon Nanotubes Induce Altered Morphology and Loss of Barrier Function in Human Bronchial Epithelia at Non-Cytotoxic Doses. *Int J Nanomed* 2014 Aug 25;9:4093-105. doi: 10.2147/IJN.S65567. eCollection 2014. PMID: 25187712; PMCID: PMC4149455
44. Taylor AJ, McClure CD, Shipley-Phillips JK, Hussain S, **Garantziotis S**, Parsons GN, Bonner JC. Atomic layer deposition coating of multi-walled carbon nanotubes with aluminum oxide alters innate immune responses of human mononuclear phagocytes in vitro. *PLoS One* 2014 Sep 12;9(9):e106870. doi: 10.1371/journal.pone.0106870. eCollection 2014. PMID 25216247; PMCID: PMC4162563
45. McMahan RL, Strynar MJ, Dagnino S, Herr DW, Moser VC, **Garantziotis S**, Andersen EM, Freeborn DL, McMillan L, Lindstrom AB. Identification of fipronil metabolites by time-of-flight mass spectrometry for application in a human exposure study. *Environ Int*. 2015 Feb 13;78C:16-23. PMID: 25687022; PMCID in progress
46. Thayer KA, Doerge DR, Taylor KW, **Garantziotis S**, Schurman S, Kissling GE, Hunt D, Herbert B, Church R, Jankowich R, Churchwell MI, Scheri RC, Birnbaum LS, Bucher JR. Bisphenol A, Bisphenol S and 4-Hydroxyphenyl 4-Isopropoxyphenylsulfone (BPSIP) in Urine and Blood of Cashiers Pre- and Post-Shift. *Environ Health Perspect* 2016 124(4):437-444 PMID: 26309242 PMCID: PMC4824622
47. Thayer KA, Doerge DR, Hunt D, Schurman S, Twaddle NC, Churchwell MI, **Garantziotis S**, McCarver G, Kissling GE, Easterling MR, Bucher JR, Birnbaum LS. Pharmacokinetics of Bisphenol A in Humans Following a Single Oral Administration. Accepted, *Environ Int* 2015 Oct;83:107-15. PMID 26115537; PMCID: PMC4545316
48. Song W, Yu Z, Doran SF, Ambalavanan N, Steele C, **Garantziotis S**, and Matalon S. Exacerbation of chlorine induced airway hyper-responsiveness by pre-existing respiratory

- syncytial virus infection. *Am J Physiol Lung Cell Mol Physiol*. 2015 Aug 1;309(3):L205-10. PMID: 26071553; PMCID: PMC4525118
49. Lamas A*, Marshburn J*, Stober VP, Donaldson S, **Garantziotis S**. Inhaled high-molecular weight hyaluronan in inflammatory airway disease. *Respir Res*. 2016 Oct 3;17(1):123 PMID:27716205 PMCID: PMC5048477
 50. Hussain S, Ji X, Taylor AJ, Miller-DeGraff L, George M, Tucker CJ, Chang CH, Li R, Bonner JC, **Garantziotis S**. High molecular weight hyaluronan functionalization of multi-walled carbon nanotubes reduces their pulmonary toxicity. *ACS Nano*. 2016 Aug 23;10(8):7675-88 PMID 27453049 PMCID pending
 51. Hussain S*, Kodavanti PP*, Marshburn J, Janoshazi A, Marinakos S, George M, Rice A, Wiesner MR, **Garantziotis S**. Decreased uptake and enhanced mitochondrial protection underlie decreased toxicity of nanoceria in human macrophages compared to monocytes. Accepted, *J Biomed Nanotechnol*, 2016.
 52. Stober VP, Lim YP, Opal S, Zhuo L, Kimata K, **Garantziotis S**. Inter- α -trypsin inhibitor ameliorates endothelial injury in sepsis. In revision
 53. Stober VP, Johnson CG, Majors A, Lauer M, Aronica M, Day AJ, **Garantziotis S**. TSG-6 Mediates Airway Hyperresponsiveness after Environmental Ozone Exposure by Promoting Hyaluronan-induced Activation of Airway Smooth Muscle. In revision.
 54. Trempus CS, Stober VP, Johnson CG, Wang S, Matalon S, **Garantziotis S**. Primary cilia mediate airway smooth muscle contractility. In revision
 55. Schurman S*, Bravo M*, Innes C, Strauss B, Braxton J, Miranda ML*, **Garantziotis S***. Relationships between TLR4 pathway Single Nucleotide Polymorphisms, Distance to Roadway, and Asthma Diagnosis and Severity. Submitted
 56. Walker JLK, Theriot B, Ghio M, Trempus C, Wong J, McQuade V, Liang J, Jiang D, Noble PW, **Garantziotis S**, Kraft M, Ingram JL. Targeted expression of hyaluronan synthase 2 (*HAS2*) in contractile cells dampens airway responsiveness in a mouse model of chronic allergic airways disease. Submitted
 57. Snyder RJ, Hussain S, Tucker CJ, Randell SH, **Garantziotis S**. Impaired ciliogenesis in differentiating human bronchial epithelia exposed to nontoxic doses of multi-walled carbon nanotubes. Submitted
 58. Whirledge SD, Jewell CM, Barber L, Xu X, Katen KS, **Garantziotis S**, Cidlowski JA. Generating diversity in human glucocorticoid signaling through a racially diverse polymorphism in the beta isoform of the glucocorticoid receptor. In revision.
 59. Snyder RJ, DeGraff LM, Madenspacher J, Hussain S, **Garantziotis S**. Attenuated Club Cell Regeneration After Naphthalene Lung Injury and Low-Dose Exposure to Carbonaceous Particulate Matter. Submitted
 60. Johnson CG, Stober VP, Cyphert JM, Flake G, Kali V, Midura RJ, Aronica MA, **Garantziotis S**. High molecular weight hyaluronan ameliorates allergic inflammation and airway hyperresponsiveness in the mouse. Submitted

Book Chapters/ Invited reviews:

1. **Garantziotis S**, Kyrmizakis DE, Liolios AD. Critical care of the head and neck patient. *Crit Care Clin*. 2003;19(1):73-90
2. Palmer SM, **Garantziotis S**, Reinsmoen NL. Clinical significance of anti-HLA antibodies in lung transplantation. *Curr Opin Organ Transplant* 2003; 8: 217-221
3. **Garantziotis S**. Water and Electrolyte Imbalance in Pregnancy. Seminar Compendium, VI Critical Care Seminar on Fluid and Electrolytes, (G. Baltopoulos, Ed) pp 299-308. P.X. Paschalides Press, 2003
4. **Garantziotis S**, Steele MP, Schwartz DA. Pulmonary fibrosis: thinking outside of the lung. *J Clin Invest*. 2004 Aug;114(3):319-21

5. **Garantziotis S**, Schwartz, DA. Genetics of the Pulmonary Response to Environmental Agents. *Clin Pulm Med* 2004;11(6): 363-368
6. **Garantziotis S**. Innate Immunity, Inflammation and Infection. New receptors (TLR, NOD, TREM) in antimicrobial Immunity. Seminar Compendium, VII Critical Care Seminar on Sepsis and Septic Shock, (G. Baltopoulos, Ed). 2005
7. **Garantziotis S**, Schwartz DA. Host-environmental interactions in IPF. In *Idiopathic Pulmonary Fibrosis* (V. Thannikal, and J. P. Lynch, III, Guest Editors), *Semin Respir Crit Care Med*. 27(6):574-80 (2006)
8. **Garantziotis S**, Palmer SM. Innate immunity in lung transplantation. In *Contributions in Transplantation*, Prous Science Publishers, Barcelona 2006
9. **Garantziotis S**, Hollingsworth JW, Zaas AK, Schwartz DA. The effect of Toll-like Receptors and Toll-like Receptor Genetics in Human Disease. *Annu Rev Med*. 2008;59:343-59
10. **Garantziotis S**, Palmer SM. Genetics and genomics in lung transplantation. *Expert Rev Respir Med*. 2007 Oct;1(2):271-8
11. **Garantziotis S**, Palmer SM. An unwelcome guest – Aspergillus colonization and BOS in lung transplantation. *Am J Transpl* 2009 Aug;9(8):1705-6
12. **Garantziotis S**, Schwartz DA. EcoGenetics of Respiratory Diseases of Public Health Significance. *Annu Rev Public Health* 2010 2010 Apr 21;31:37-51
13. **Garantziotis S**. Modulation of plasma complement by the initial dose of epirubicin/docetaxel therapy in breast cancer and its predictive value (letter). *Br J Cancer* 2011, Feb 1;104(3):542; author reply 543-4
14. Bonner JC, Ryman-Rasmussen JP, Card JW, **Garantziotis S**, and Zeldin DC. Potential Respiratory Health Risks of Engineered Carbon Nanotubes. In *Pulmonary Nanomedicine: Diagnostics, Imaging and Therapeutics*, Pan Stanford Publishing 2011
15. Hussain S, **Garantziotis S**. Interplay between apoptotic and autophagy pathways after exposure to cerium dioxide nanoparticles in human monocytes. *Autophagy*. 2013 Jan;9(1):101-3. PMID: 23047327; PMCID: 3542208
16. Hussain S, **Garantziotis S**, Rodrigues-Lima F, Dupret JM, Baeza-Squiban A, Boland S. Intracellular signal modulation by nanomaterials. *Adv Exp Med Biol*. 2014; 811:111-34. PMID: 24683030
17. Yokel RA, Hussain S, **Garantziotis S**, Demokritou P, Castranova V and Cassee F. The Yin: An adverse health perspective of nanoceria: uptake, distribution, accumulation, and mechanisms of its toxicity. *Env Sci: Nano* 2014 Oct 1;1(5):406-428. PMID: 25243070
18. Lauer ME, Dweik RA, **Garantziotis S**, Aronica MA. The rise and fall of hyaluronan in respiratory diseases. *Int J Cell Biol*. 2015;2015:712507
19. Cyphert JM, Trempus C, **Garantziotis S**. Size matters: molecular weight specificity of hyaluronan effects in cell biology. *Int J Cell Biol*. 2015;2015:563818
20. **Garantziotis S**, Brezina M, Castelnovo P, Drago L. The role of hyaluronan in the treatment of respiratory disease. *Am J Physiol Lung Cell Mol Physiol*. 2016 May 1;310(9):L785-95.

Patents

Hyaluronan antagonists for the treatment of airway hyperresponsiveness in asthma (pending)

Funding support-Past-

American Thoracic Society / American Society of Transplantation Partnership Grant (PI: Garantziotis) 1/1/2006-12/31/2008

To investigate the effects of innate immune activation on alloimmune lung injury in a novel murine model.

National Institute of Environmental Health Sciences (intramural) (Co-PI: Garantziotis)
7/2010-7/2013

Coupling of the Innate Immunity Response, DNA damage, and p53 Networks of the Macrophage

Funding support-Current-

1ZIA ES 102605

PI: Garantziotis

08/2008-current

The role of hyaluronan and inter-alpha-trypsin inhibitor in tissue injury

This project investigates the role of two abundant but understudied extracellular matrix molecules, hyaluronan and inter- α -inhibitor, in the response to environmental lung injury.