

# CURRICULUM VITAE

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## EDUCATION and TRAINING

### Undergraduate

1971 - 1973	University of California, Berkeley Berkeley, California	A.B. Biological Sciences
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### Graduate

1974 - 1978	New York University New York, NY	MS Environmental Health Sciences
1974 - 1981	New York University	Environmental Health Sciences Graduate Student Fellowship
1979 - 1981	New York University New York, NY	PhD Environmental Health Sciences

### Postgraduate

1981 - 1985	Cardiovascular Research Institute, University of California, San Francisco San Francisco, California	Fellowship Pulmonary Cell and Molecular Biology
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## APPOINTMENTS and POSITIONS

### Academic

2009 - Present	Graduate School of Public Health University of Pittsburgh Pittsburgh, PA	Professor Environmental and Occupational Health
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2007 - 2009	Graduate School of Public Health University of Pittsburgh Pittsburgh, PA	Visiting Professor Environmental and Occupational Health
2003	NC State University Duke University UNC at Chapel Hill	Visiting Pulmonary Scholar NIEHS, U.S. EPA, CIIT Centers for Health Research
1998 - 2008	College of Medicine University of Cincinnati Cincinnati, OH	Professor Environmental Health
1998 - 2001	Cincinnati, OH University of Cincinnati	Professor (Adjunct) Molecular and Cell Physiology
1998 - 2008	University of Cincinnati Cincinnati, OH	Professor (Adjunct) Internal Medicine, Division of Pulmonary Disease/Critical Care Medicine
1990 - 1998	University of Cincinnati Cincinnati, OH	Associate Professor Environmental Health
1988	Toxicology and Physiological Chemistry I Stockholm, Sweden	Visiting Scientist Karolinska Institutet
1986 - 1990	University of Cincinnati Cincinnati, OH	Assistant Professor Environmental Health
1985 - 1986	Environmental Medicine New York, NY	Research Assistant Professor New York University Medical Center
1976 - 1981	Environmental Medicine New York, NY	Assistant Research Scientist New York University Medical Center

### Other Professional Positions

1973 - 1975	Tabershaw-Cooper Associates Berkeley, CA	Research Scientist Environmental and Occupational Health Consultants
1986 - 2007	University of Cincinnati, College of Medicine, Cincinnati, OH	Director, Pulmonary Cell Biology Laboratory
1987 - 2005	University of Cincinnati, College of Medicine Cincinnati, OH	Associate Director, Dept. Environmental Health
1989 - 1991	Ohio Valley Branch of the Tissue Culture Association	President
1989 - 1991	University of Cincinnati,	Associate Director,

	College of Medicine Cincinnati, OH	Cystic Fibrosis Research Center
1991 - 1996	University of Cincinnati, College of Medicine Cincinnati, OH	Director, Inhalation and Aerosol Core Facility
1992 - 2007	University of Cincinnati, College of Medicine Cincinnati, OH	Deputy Director, Center for Environmental Genetics
1995 - 1998	University of Cincinnati, College of Medicine Cincinnati, OH	Director, Environmental Toxicology Graduate Training Program
1996 - 2007	University of Cincinnati, College of Medicine Cincinnati, OH	Director, Environmental Genetics and Molecular Toxicology Division
2004 - 2008	Lovelace Respiratory Research Institute Albuquerque, NM	Scientist (Adjunct)

## MEMBERSHIP in PROFESSIONAL and SCIENTIFIC SOCIETIES

American Association for the Advancement of Science  
 American Conference of Governmental Industrial Hygienists  
 American Heart Association  
 American Physiologic Society  
 American Society for Cell Biology  
 American Thoracic Society  
 New York Academy of Science  
 Society of Toxicology (Lifetime Member)

## AWARDS

1982 - 1983 Strobel Medical Research Fund Award, American Lung Association of San Francisco  
 1985 New Investigator, National Heart, Lung and Blood Institute  
 1985 Kenneth Morgareidge Award, International Life Sciences Institute  
 2017 Society of Toxicology, Honorary Member  
 2019 American Journal of Respiratory Cellular and Molecular Biology, Top Reviewer Award

## PUBLICATIONS

**Web of Knowledge: *h*-index = 45; Average citation per item = 50.1**

**Google Scholar; *h*-index = 52; *i10*-index = 113**

### Peer-reviewed Publications

1. Lippmann M, Schlesinger RB, **Leikauf G**. Effects of sulfuric acid aerosol inhalations. *Am J Ind Med*. 1980; 1:375-81. PMID: 7342776.
2. **Leikauf G**, Yeates DB, Wales KA, Spektor D, Albert RE, Lippmann M. Effects of sulfuric acid aerosol on respiratory mechanics and mucociliary particle clearance in healthy nonsmoking adults. *Am Ind Hyg Assoc J*. 1981 Apr; 42 (4):273-82. PMID: 7234686.
3. Lippmann M, **Leikauf G**, Spektor D, Schlesinger RB, Albert RE. The effects of irritant aerosols on mucus clearance from large and small conductive airways. *Chest*. 1981 Dec; 80:873-7. PMID: 7307630.
4. Yeates DB, Spektor DM, **Leikauf GD**, Pitt BR. Effects of drugs on mucociliary transport in the trachea and bronchial airways. *Chest*. 1981 Dec; 80:870-3. PMID: 7307629.
5. Lippmann M, Schlesinger RB, **Leikauf G**, Spektor D, Albert RE. Effects of sulphuric acid aerosols on respiratory tract airways. *Ann Occup Hyg*. 1982; 26:677-90. PMID: 7181298.
6. **Leikauf GD**, Ueki IF, Nadel JA. Autonomic regulation of viscoelasticity of cat tracheal gland secretions. *J Appl Physiol Respir Environ Exerc Physiol*. 1984 Feb; 56 (2):426-30. PMID: 6706754.
7. **Leikauf GD**, Spektor DM, Albert RE, Lippmann M. Dose-dependent effects of submicrometer sulfuric acid aerosol on particle clearance from ciliated human lung airways. *Am Ind Hyg Assoc J*. 1984 May; 45 (5):285-92. PMID: 6741776.
8. **Leikauf GD**, Ueki IF, Nadel JA, Widdicombe JH. Bradykinin stimulates Cl secretion and prostaglandin E2 release by canine tracheal epithelium. *Am J Physiol*. 1985 Jan; 248:F48-55. PMID: 3918456.
9. Lazarus SC, **Leikauf GD**, McCabe LJ, Paige K, Chung KF, Nadel JA, Gold WM. Immunologic challenge and epithelial ion transport in canine trachea. *Chest*. 1985 May; 87:188S-9S. doi: 10.1378/chest.87.5\_Supplement.188S.
10. Spektor DM, **Leikauf GD**, Albert RE, Lippmann M. Effects of submicrometer sulfuric acid aerosols on mucociliary transport and respiratory mechanics in asymptomatic asthmatics. *Environ Res*. 1985 Jun; 37 (1):174-91. PMID: 3996336.
11. O'Byrne PM, **Leikauf GD**, Aizawa H, Bethel RA, Ueki IF, Holtzman MJ, Nadel JA. Leukotriene B4 induces airway hyperresponsiveness in dogs. *J Appl Physiol* (1985). 1985 Dec; 59 (6):1941-6. PMID: 3001017.

12. Aizawa H, Chung KF, **Leikauf** GD, Ueki I, Bethel RA, O'Byrne PM, Hirose T, Nadel JA. Significance of thromboxane generation in ozone-induced airway hyperresponsiveness in dogs. *J Appl Physiol* (1985). 1985 Dec; 59 (6):1918-23. PMID: 3935642.
13. **Leikauf** GD, Ueki IF, Widdicombe JH, Nadel JA. Alteration of chloride secretion across canine tracheal epithelium by lipoxygenase products of arachidonic acid. *Am J Physiol*. 1986 Jan; 250:F47-53. PMID: 3079967.
14. Chung KF, Aizawa H, **Leikauf** GD, Ueki IF, Evans TW, Nadel JA. Airway hyperresponsiveness induced by platelet-activating factor: role of thromboxane generation. *J Pharmacol Exp Ther*. 1986 Mar; 236 (3):580-4. PMID: 3005546.
15. Seltzer J, Bigby BG, Stulbarg M, Holtzman MJ, Nadel JA, Ueki IF, **Leikauf** GD, Goetzl EJ, Boushey HA. O<sub>3</sub>-induced change in bronchial reactivity to methacholine and airway inflammation in humans. *J Appl Physiol* (1985). 1986 Apr; 60 (4):1321-6. PMID: 3084448.
16. Lazarus SC, McCabe LJ, Nadel JA, Gold WM, **Leikauf** GD. Effects of mast cell-derived mediators on epithelial cells in canine trachea. *Am J Physiol*. 1986 Sep; 251:C387-94. PMID: 3092676.
17. Corrales RJ, Coleman DL, Jacoby DB, **Leikauf** GD, Hahn HL, Nadel JA, Widdicombe JH. Ion transport across cat and ferret tracheal epithelia. *J Appl Physiol* (1985). 1986 Sep; 61 (3):1065-70. PMID: 3759745.
18. Driscoll KE, **Leikauf** GD, Schlesinger RB. Effects of in vitro and in vivo ozone exposure on eicosanoid production in rabbit alveolar macrophage. *Inhal Tox*. 1988; 1:109-22.
19. **Leikauf** GD, Driscoll KE, Wey HE. Ozone-induced augmentation of eicosanoid metabolism in epithelial cells from bovine trachea. *Am Rev Respir Dis*. 1988 Feb; 137 (2):435-42. PMID: 3341632.
20. Schumann BL, Cody TE, Miller ML, **Leikauf** GD. Isolation, characterization, and long-term culture of fetal bovine tracheal epithelial cells. *In Vitro Cell Dev Biol*. 1988 Mar; 24 (3):211-6. PMID: 2450863.
21. **Leikauf** GD, Leming LM, O'Donnell JR, Doupnik CA. Bronchial responsiveness and inflammation in guinea pigs exposed to acrolein. *J Appl Physiol* (1985). 1989 Jan; 66 (1):171-8. PMID: 2917919.
22. **Leikauf** GD, Doupnik CA, Leming LM, Wey HE. Sulfidopeptide leukotrienes mediate acrolein-induced bronchial hyperresponsiveness. *J Appl Physiol* (1985). 1989 Apr; 66 (4):1838-45. PMID: 2543658.
23. Lee HK, **Leikauf** GD, Sperelakis N. Electromechanical effects of endothelin on ferret bronchial and tracheal smooth muscle. *J Appl Physiol* (1985). 1990 Jan; 68 (1):417-20. PMID: 2179208.

24. **Leikauf** GD, Claesson HE, Doupnik CA, Hybbinette S, Grafström RC. Cysteinyl leukotrienes enhance growth of human airway epithelial cells. *Am J Physiol.* 1990 Oct; 259:L255-61. PMID: 2171354.
25. Doupnik CA, **Leikauf** GD. Acrolein stimulates eicosanoid release from bovine airway epithelial cells. *Am J Physiol.* 1990 Oct; 259:L222-9. PMID: 2221083.
26. Fernandez I, Summers E, Montero MT, Orensanz LM, **Leikauf** G. A method for culturing rat oviduct gamma-aminobutyric acid cells. *Brain Res Bull.* 1991 May; 26 (5):821-3. PMID: 1933402.
27. Plews PI, Abdel-Malek ZA, Doupnik CA, **Leikauf** GD. Endothelin stimulates chloride secretion across canine tracheal epithelium. *Am J Physiol.* 1991 Aug; 261:L188-94. PMID: 1651666.
28. Koyama S, Rennard SI, **Leikauf** GD, Robbins RA. Bronchial epithelial cells release monocyte chemotactic activity in response to smoke and endotoxin. *J Immunol.* 1991 Aug 1; 147 (3):972-9. PMID: 1861084.
29. Koyama S, Rennard SI, **Leikauf** GD, Shoji S, Von Essen S, Claassen L, Robbins RA. Endotoxin stimulates bronchial epithelial cells to release chemotactic factors for neutrophils. A potential mechanism for neutrophil recruitment, cytotoxicity, and inhibition of proliferation in bronchial inflammation. *J Immunol.* 1991 Dec 15; 147 (12):4293-301. PMID: 1753099.
30. Smith JS Jr, Wey HE, **Leikauf** GD, Baxter CS. JB6 murine epidermal cell lines sensitive and resistant to 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced transformation exhibit differential arachidonic acid metabolism in response to TPA and the calcium ionophore A23187. *Carcinogenesis.* 1992 Feb; 13 (2):189-92. PMID: 1740008.
31. **Leikauf** GD. Mechanisms of aldehyde-induced bronchial reactivity: role of airway epithelium. *Res Rep Health Eff Inst.* 1992 Feb; 1-35. PMID: 1315139.
32. Smith JS Jr, Wey HE, **Leikauf** GD, Baxter CS. Carba-prostacyclin inhibits 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced transformation in sensitive murine epidermal JB6 cells. *Carcinogenesis.* 1992 Oct; 13 (10):1859-62. PMID: 1423845.
33. Driscoll KE, Simpson L, Carter J, Hassenbein D, **Leikauf** GD. Ozone inhalation stimulates expression of a neutrophil chemotactic protein, macrophage inflammatory protein 2. *Toxicol Appl Pharmacol.* 1993 Apr; 119 (2):306-9. PMID: 8480341.
34. Swiecichowski AL, Long KJ, Miller ML, **Leikauf** GD. Formaldehyde-induced airway hyperreactivity in vivo and ex vivo in guinea pigs. *Environ Res.* 1993 May; 61 (2):185-99. PMID: 8495661.

35. Abbinante-Nissen JM, Simpson LG, **Leikauf** GD. Neutrophil elastase increases secretory leukocyte protease inhibitor transcript levels in airway epithelial cells. *Am J Physiol*. 1993 Sep; 265:L286-92. PMID: 8105697.
36. **Leikauf** GD, Zhao Q, Zhou S, Santrock J. Ozonolysis products of membrane fatty acids activate eicosanoid metabolism in human airway epithelial cells. *Am J Respir Cell Mol Biol*. 1993 Dec; 9 (6):594-602. PMID: 8257591.
37. Raz M, Robbins RA, Kelling CL, Stine LC, **Leikauf** GD, Rennard SI, Spurzem JR. Viral infection of bovine bronchial epithelial cells induces increased neutrophil chemotactic activity and neutrophil adhesion. *Clini Sci (London)*. 1993 Dec; 85 (6):753-60. PMID: 8287669.
38. **Leikauf** GD, Simpson LS. Book Review: Inflammatory Cells and Mediators in Bronchial Asthma. *Pediatr Pulmonol*. 1994 Oct 21; 17:272-3. doi: 10.1002/ppul.1950170412.
39. Williams SP, Campbell AK, Roszell N, Myatt L, **Leikauf** GD, Rapoport RM. Modulation of phorbol ester-induced contraction by endogenously released cyclooxygenase products in rat aorta. *Am J Physiol*. 1994 Nov; 267:H1654-62. PMID: 7977796.
40. Davis MG, Ali S, **Leikauf** GD, Dorn GW 2nd. Tyrosine kinase inhibition prevents deformation-stimulated vascular smooth muscle growth. *Hypertension*. 1994 Dec; 24 (6):706-13. PMID: 7995627.
41. Puga A, Bohm JM, Hoffer A, **Leikauf** GD, Shertzer HG, Zhou S. Dioxin alters calcium homeostasis and the regulation of arachidonate metabolism in mouse hepatoma cells. *Dioxin '95. Organohalogen Compounds*. 1995; 25:381-6.
42. **Leikauf** GD, Fink SP, Miller ML, Lockey JE, Driscoll KE. Refractory ceramic fibers activate alveolar macrophage eicosanoid and cytokine release. *J Appl Physiol (1985)*. 1995 Jan; 78 (1):164-71. PMID: 7713806.
43. **Leikauf** GD, Simpson LG, Santrock J, Zhao Q, Abbinante-Nissen J, Zhou S, Driscoll KE. Airway epithelial cell responses to ozone injury. *Environ Health Perspect*. 1995 Mar; 103:91-5. PMID: 7614953.
44. Shoji S, Ertl RF, Koyama S, Robbins R, **Leikauf** G, Von Essen S, Rennard SI. Cigarette smoke stimulates release of neutrophil chemotactic activity from cultured bovine bronchial epithelial cells. *Clin Sci (London)*. 1995 Mar; 88 (3):337-44. PMID: 7736704.
45. Zhou S, Stark JM, **Leikauf** GD. Leukotriene B4 formation: human neutrophil-airway epithelial cell interactions. *J Appl Physiol (1985)*. 1995 Apr; 78 (4):1396-403. PMID: 7615447.
46. Abbinante-Nissen JM, Simpson LG, **Leikauf** GD. Corticosteroids increase secretory leukocyte protease inhibitor transcript levels in airway epithelial cells. *Am J Physiol*. 1995

Apr; 268:L601-6. PMID: 7733301.

47. **Leikauf** GD, Kline S, Albert RE, Baxter CS, Bernstein DI, Buncher CR. Evaluation of a possible association of urban air toxics and asthma. *Environ Health Perspect.* 1995 Sep; 103:253-71. PMID: 8549483.
48. **Leikauf** GD, Zhao Q, Zhou S, Santrock J. Activation of eicosanoid metabolism in human airway epithelial cells by ozonolysis products of membrane fatty acids. *Res Rep Health Eff Inst.* 1995 Sep; 1-15; discussion 19-26. PMID: 11379054.
49. Koyama S, Rennard SI, **Leikauf** GD, Ertl RF, Robbins RA. Antiproteases attenuate the release of neutrophil chemotactic activity from bronchial epithelial cells induced by smoke. *Exp Lung Res.* 1996 Jan; 22 (1):1-19. PMID: 8838132.
50. Bernstein JA, Munson J, Lummus ZL, Balakrishnan K, **Leikauf** G. T-cell receptor V beta gene segment expression in diisocyanate-induced occupational asthma. *J Allergy Clin Immunol.* 1997 Feb; 99 (2):245-50. PMID: 9042053.
51. Lee JJ, McGarry MP, Farmer SC, Denzler KL, Larson KA, Carrigan PE, Brenneise IE, Horton MA, Haczku A, Gelfand EW, **Leikauf** GD, Lee NA. Interleukin-5 expression in the lung epithelium of transgenic mice leads to pulmonary changes pathognomonic of asthma. *J Exp Med.* 1997 Jun 16; 185 (12):2143-56. PMID: 9182686.
52. Hardie WD, Bruno MD, Huelsman KM, Iwamoto HS, Carrigan PE, **Leikauf** GD, Whitsett JA, Korfhagen TR. Postnatal lung function and morphology in transgenic mice expressing transforming growth factor-alpha. *Am J Pathol.* 1997 Oct; 151 (4):1075-83. PMID: 9327741.
53. Prows DR, Shertzer HG, Daly MJ, Sidman CL, **Leikauf** GD. Genetic analysis of ozone-induced acute lung injury in sensitive and resistant strains of mice. *Nat Genet.* 1997 Dec; 17 (4):471-4. PMID: 9398853.
54. Puga A, Hoffer A, Zhou S, Bohm JM, **Leikauf** GD, Shertzer HG. Sustained increase in intracellular free calcium and activation of cyclooxygenase-2 expression in mouse hepatoma cells treated with dioxin. *Biochem Pharmacol.* 1997 Dec 15; 54 (12):1287-96. PMID: 9393671.
55. Zhao Q, Simpson LG, Driscoll KE, **Leikauf** GD. Chemokine regulation of ozone-induced neutrophil and monocyte inflammation. *Am J Physiol.* 1998 Jan; 274:L39-46. PMID: 9458799.
56. Yu M, Jamieson GA Jr, **Leikauf** GD, Nebert DW. Phospholipase A2 activation and increases in specific prostaglandins in the oxidatively stressed 14CoS/14CoS mouse hepatocyte line. *Biochem Pharmacol.* 1998 Jan 15; 55 (2):193-200. PMID: 9448742.
57. Prows DR, **Leikauf** GD. Genotypes for 66 microsatellite markers in the AXB and BXA



- recombinant inbred mouse strains. *Mamm Genome*. 1998 Feb; 9 (2):160-1. PMID: 9457680.
58. Borchers MT, Wert SE, **Leikauf** GD. Acrolein-induced MUC5ac expression in rat airways. *Am J Physiol*. 1998 Apr; 274:L573-81. PMID: 9575876.
  59. Borchers MT, Carty MP, **Leikauf** GD. Regulation of human airway mucins by acrolein and inflammatory mediators. *Am J Physiol*. 1999 Apr; 276:L549-55. PMID: 10198352.
  60. Prows DR, Daly MJ, Shertzer HG, **Leikauf** GD. Ozone-induced acute lung injury: genetic analysis of F(2) mice generated from A/J and C57BL/6J strains. *Am J Physiol*. 1999 Aug; 277:L372-80. PMID: 10444532.
  61. Borchers MT, Wesselkamper S, Wert SE, Shapiro SD, **Leikauf** GD. Monocyte inflammation augments acrolein-induced Muc5ac expression in mouse lung. *Am J Physiol*. 1999 Sep; 277:L489-97. PMID: 10484456.
  62. Hardie WD, Prows DR, **Leikauf** GD, Korfhagen TR. Attenuation of acute lung injury in transgenic mice expressing human transforming growth factor-alpha. *Am J Physiol*. 1999 Nov; 277:L1045-50. PMID: 10564191.
  63. **Leikauf** GD, McDowell SA, Gammon K, Wesselkamper SC, Bachurski CJ, Puga A, Wiest JS, **Leikauf** JE, Prows DR. Functional genomics of particle-induced lung injury. *Inhal Tox*. 2000; 12:59-73.
  64. McGraw DW, Forbes SL, Mak JC, Witte DP, Carrigan PE, **Leikauf** GD, Liggett SB. Transgenic overexpression of beta(2)-adrenergic receptors in airway epithelial cells decreases bronchoconstriction. *Am J Physiol Lung Cell Mol Physiol*. 2000 Aug; 279 (2):L379-89. PMID: 10926562.
  65. Wesselkamper SC, Prows DR, Biswas P, Willeke K, Bingham E, **Leikauf** GD. Genetic susceptibility to irritant-induced acute lung injury in mice. *Am J Physiol Lung Cell Mol Physiol*. 2000 Sep; 279 (3):L575-82. PMID: 10956633.
  66. Rihn BH, Mohr S, McDowell SA, Binet S, Loubinoux J, Galateau F, Keith G, **Leikauf** GD. Differential gene expression in mesothelioma. *FEBS Lett*. 2000 Sep 1; 480:95-100. PMID: 11034307.
  67. McDowell SA, Gammon K, Bachurski CJ, Wiest JS, **Leikauf** JE, Prows DR, **Leikauf** GD. Differential gene expression in the initiation and progression of nickel-induced acute lung injury. *Am J Respir Cell Mol Biol*. 2000 Oct; 23 (4):466-74. PMID: 11017911.
  68. **Leikauf** GD, McDowell SA, Bachurski CJ, Aronow BJ, Gammon K, Wesselkamper SC, Hardie W, Wiest JS, **Leikauf** JE, Korfhagen TR, Prows DR. Functional genomics of oxidant-induced lung injury. *Adv Exp Med Biol*. 2001; 500:479-87. PMID: 11764985.

69. Miller CR, **Leikauf** GD, Biswas P. Combustion generated nickel species aerosols: Role of chemical and morphological properties in lung injury. *Aerosol Sci Tech.* 2001; 35 (4):829-39. doi: 10.1080/027868201753227389.
70. Samet JM, Deary A, Eggeleston PA, Ford J, Froines J, Gelobbter M, Gong Jr H, Kinney PL, **Leikauf** GD, Lippsett M, Lwebuga-Mukasa JS, Manniono D, McDonnell W, Morandi MT, Neas LM, Porras C, Prasad S, Redd S, Schwab M, Servin T, Shepard P, Spengler JD, Sugerman-Brozan J, Targ N, Wallace D, White RH, Woodruff T. Urban air pollution and health inequities: a workshop report. *Env Health Perspect.* 2001; 109:357-74. PMCID: PMC1240553. PMID: 11427385.
71. Prows DR, **Leikauf** GD. Quantitative trait analysis of nickel-induced acute lung injury in mice. *Am J Respir Cell Mol Biol.* 2001 Jun; 24 (6):740-6. PMID: 11415940.
72. **Leikauf** GD, McDowell SA, Wesselkamper SC, Miller CR, Hardie WD, Gammon K, Biswas PP, Korfhagen TR, Bachurski CJ, Wiest JS, Willeke K, Bingham E, **Leikauf** JE, Aronow BJ, Prows DR. Pathogenomic mechanisms for particulate matter induction of acute lung injury and inflammation in mice. *Res Rep Health Eff Inst.* 2001 Dec; 5-58; PMID: 11954676.
73. McDowell SA, Mallakin A, Bachurski CJ, Toney-Earley K, Prows DR, Bruno T, Kaestner KH, Witte DP, Melin-Aldana H, Degen SJ, **Leikauf** GD, Waltz SE. The role of the receptor tyrosine kinase Ron in nickel-induced acute lung injury. *Am J Respir Cell Mol Biol.* 2002 Jan; 26 (1):99-104. PMID: 11751209.
74. **Leikauf** GD, McDowell SA, Wesselkamper SC, Hardie WD, **Leikauf** JE, Korfhagen TR, Prows DR. Acute lung injury: functional genomics and genetic susceptibility. *Chest.* 2002 Mar; 121:70S-75S. PMID: 11893692.
75. Hardie WD, Prows DR, Piljan-Gentle A, Dunlavy MR, Wesselkamper SC, **Leikauf** GD, Korfhagen TR. Dose-related protection from nickel-induced lung injury in transgenic mice expressing human transforming growth factor-alpha. *Am J Respir Cell Mol Biol.* 2002 Apr; 26 (4):430-7. PMID: 11919079.
76. **Leikauf** GD, Borchers MT, Prows DR, Simpson LG. Mucin apoprotein expression in COPD. *Chest.* 2002 May; 121:166S-182S. PMID: 12010847.
77. Stark JM, McDowell SA, Koenigsnecht V, Prows DR, **Leikauf** JE, Le Vine AM, **Leikauf** GD. Genetic susceptibility to respiratory syncytial virus infection in inbred mice. *J Med Virology.* 2002 May; 67 (1):92-100. PMID: 11920822.
78. Mohr S, **Leikauf** GD, Keith G, Rihn BH. Microarrays as cancer keys: an array of possibilities. *J Clin Oncol.* 2002 Jul 15; 20 (14):3165-75. PMID: 12118031.
79. **Leikauf** GD. Hazardous air pollutants and asthma. *Environ Health Perspect.* 2002 Aug; 110:505-26. PMCID: PMC1241200. PMID: 12194881.

80. McDowell SA, Gammon K, Zingarelli B, Bachurski CJ, Aronow BJ, Prows DR, **Leikauf** GD. Inhibition of nitric oxide restores surfactant gene expression following nickel-induced acute lung injury. *Am J Respir Cell Mol Biol*. 2003 Feb; 28 (2):188-98. PMID: 12540486.
81. Prows DR, McDowell SA, Aronow BJ, **Leikauf** GD. Genetic susceptibility to nickel-induced acute lung injury. *Chemosphere*. 2003 Jun; 51 (10):1139-48. PMID: 12718980.
82. Perkowski S, Sun J, Singhal S, Santiago J, **Leikauf** GD, Albelda SM. Gene expression profiling of the early pulmonary response to hyperoxia in mice. *Am J Respir Cell Mol Biol*. 2003 Jun; 28 (6):682-96. PMID: 12760966.
83. **Leikauf** GD, Hardie WD, Wesselkamper SC, Bachurski CJ, Medvedovic M, et al.. Resolving Gene-Environment Interactions in Complex Traits: Acute Lung Injury. In: *Functional Genomics of Lung Disease*; *Am J Respir Cell Mol Biol* 31: S23-34; 2004. doi: 10.1165/rcmb.2004-0071SU.
84. Deshmukh HS, Case LM, Wesselkamper SC, Borchers MT, Martin LD, Shertzer HG, Nadel JA, **Leikauf** GD. Metalloproteinases mediate mucin 5AC expression by epidermal growth factor receptor activation. *Am J Respir Crit Care Med*. 2005 Feb 15; 171 (4):305-14. PMID: 15531749.
85. **Leikauf** GD, Deshmukh HS. When wheeze leads to squeeze: growth under pressure. *Am J Respir Cell Mol Biol*. 2005 May; 32 (5):366. doi: 10.1165/rcmb.F297.
86. Wesselkamper SC, Case LM, Henning LN, Borchers MT, Tichelaar JW, Mason JM, Dragin N, Medvedovic M, Sartor MA, Tomlinson CR, **Leikauf** GD. Gene expression changes during the development of acute lung injury: role of transforming growth factor beta. *Am J Respir Crit Care Med*. 2005 Dec 1; 172 (11):1399-411. PMCID: PMC2718437. PMID: 16100012.
87. Wesselkamper SC, McDowell SA, Medvedovic M, Dalton TP, Deshmukh HS, Sartor MA, Case LM, Henning LN, Borchers MT, Tomlinson CR, Prows DR, **Leikauf** GD. The role of metallothionein in the pathogenesis of acute lung injury. *Am J Respir Cell Mol Biol*. 2006 Jan; 34 (1):73-82. PMCID: PMC2644192. PMID: 16166738.
88. Mallakin A, Kutcher LW, McDowell SA, Kong S, Schuster R, Lentsch AB, Aronow BJ, **Leikauf** GD, Waltz SE. Gene expression profiles of Mst1r-deficient mice during nickel-induced acute lung injury. *Am J Respir Cell Mol Biol*. 2006 Jan; 34 (1):15-27. PMCID: PMC2644188. PMID: 16166746.
89. Sartor MA, Tomlinson CR, Wesselkamper SC, Sivaganesan S, **Leikauf** GD, Medvedovic M. Intensity-based hierarchical Bayes method improves testing for differentially expressed genes in microarray experiments. *BMC Bioinformatics*. 2006 Dec 19; 7:538. PMCID: PMC1781470. PMID: 17177995.

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1. Birru RL, Bein K, Wells H, Bondarchuk N, Bachowsky A, Di YP, **Leikauf** GD. Phloretin, an apple polyphenol, inhibits chronic obstructive pulmonary disease pathogen-induced airway mucin formation. *Mol Nutr Food Res.* (In Revision)
2. Bein K, Ganguly K, Martin TM, Concel VJ, Brant KA, Peter YP, Upadhyay S, Fabisiak JP, Vuga LJ, Kaminski N, Kostem E, Eskin E, Prows DR, Jang AS, **Leikauf** GD. Genetic



- determinant of ammonia-induced acute lung injury in mice. *Am J Physiol: Lung Cell Mol Biol* (Submitted)
3. Liu CH, Chen Z, Chen K, Liao FT, Zhang CE, Liu X, Deslouches B, Lin YC, Keohavong P, **Leikauf** G, Di YP. Inflammation promotes tobacco carcinogen-induced lung cancer and determines immunotherapy efficacy. (Submitted)

### **Books, Book Chapters, Monographs**

1. Lippmann M, Lioy PJ, **Leikauf** GD, Green KB, Baxter D, Mornadi M, Pasternack BS, Fife D, Speizer FE. Effects of ozone on the pulmonary function of children. In: Lee SD, Mustafa MG, Mehlman MA, editors. *Advances in Modern Toxicology*. (5th rev. ed., pp. 423-46). Princeton, NJ: Princeton Scientific, 1983.
2. Yu CP, Hu JP, **Leikauf** GD, Spektor D, Lippmann M. Mucociliary transport and particle clearance in the human tracheobronchial tree. In: Marple VA, Liu BH, editors. *Aerosols in the Mining and Industrial Work Environments*. (pp. 177-184). Ann Arbor MI: Ann Arbor Science, 1983.
3. Jamieson Jr. GA, Flem KA, Elkousay HA, Holliday SA, **Leikauf** GD. In: Honn KV, Marnett LJ, Nigam S, Walden T, editors. *Eicosanoids and Bioactive Lipids in Cancer and Radiation Injury*. (pp. 303-8). Boston MA: Kluwer Acad. Pub., 1991.
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24. Njah J, Di Giuseppe M, Marrocco A, Fabisiak JP, **Leikauf** G, Ortiz LA. Mesenchymal Stem (Stromal) Cell Communications in Their Niche and Beyond: The Role of Extra Cellular Vesicles and Organelle Transfer in Lung Regeneration. In: Young KC, Majke SM, Ku HT editors. *Encyclopedia of Tissue Engineering and Regenerative Medicine*. (Vol.2. pp.229-242) San Diego, Academic Press (Elsevier), 2019.
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27. Bein K, **Leikauf** GD. Acrolein and Unsaturated Aldehydes. Chapter 7. In: Lippmann M, **Leikauf** GD editors. *Environmental Toxicants: Human Exposures and Their Health Effects*. (4th rev. ed., pp.205-260). Hoboken, NJ: J Willey and Sons, 2020.
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### Patients

Protection from chemical-induced acute lung injury. Patent Number: US 09492408 Patent Assignee: University of Pittsburgh-Of the Commonwealth System of Higher Education Inventor(s): **Leikauf**, George Douglas. Official Gazette of the United States Patent and Trademark Office Patents Published: Nov 15, 2016

## RESEARCH

### Current research support

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Funding Agency:	National Institutes of Health: National Institute of Environmental Health Sciences
Grant Number:	U01-ES015675
Title of Grant:	Functional Genomics of Chemical-induced Acute Lung Injury
Principal Investigator:	George D. Leikauf
Role on Grant:	Principal Investigator
Years Inclusive:	8/01/2017 – 6/30/2021

Total Amount Awarded: \$1,348,794

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Funding Agency: Department of Defense: Defense Threat Reduction Agency (DTRA)  
Grant Number: HDTRA1-16-1-004  
Title of Grant: New Therapeutic Agents for Organophosphorus Nerve Agents  
Co-Principal Investigator: Kazunori Koide (Contact), George Leikauf, Peter Wipf  
Role on Grant: Co-Principal investigator  
Years Inclusive: 06/01/2016-08/31/2020 (with 1 year possible extension)  
Total Amount Awarded: \$3,037,363

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Funding Agency: National Institutes of Health: Heart, Lung, and Blood Institute  
Grant Number: R01-HL134653  
Title of Grant: Effect of Blood Donor Sex and Testosterone on Predisposition to Hemolysis in Stored Red Blood Cells  
Principal Investigator: Tamir Kaniyas  
Role on Grant: Co-Investigator  
Years Inclusive: 01/01/2018-12/31/2022  
Total Amount Awarded: \$1,649,500

### **Past research support**

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Grant Number: R21-ES027390  
Title of Grant: Countermeasure Therapy for Acute Lung Injury  
Principal Investigator: George D. Leikauf (Contact), Jesus Tejero Bravo  
Role on Grant: Co-Principal Investigator  
Years Inclusive: 9/30/2016  
Total Amount Awarded:

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: R01-HL114795  
Title of Grant: RV/PA Recoupling by Bone Marrow Derived Mesenchymal Stem

Cells  
Principal Investigator: Luis A Ortiz  
Role on Grant: Co-Investigator  
Years Inclusive: 09/01/2012-06/30/2017  
Total Amount Awarded: \$3,406,693

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: R01-HL110344  
Title of Grant: Mesenchymal Stem Cell Secretome in Lung Fibrosis: Mitochondria and RNA Shuttle  
Principal Investigator: Luis A Ortiz  
Role on Grant: Co-Investigator  
Years Inclusive: 07/01/2013-06/30/2017  
Total Amount Awarded: \$1,557,399

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Grant Number: U01-ES015675  
Title of Grant: Functional Genomics of Chemical-induced Acute Lung Injury  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 11/22/2011 - 4/30/2017  
Total Amount Awarded: \$3,796,613  
Years Inclusive 09/29/2006 – 05/31/20011  
Total Amount Awarded \$3,619,202

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: R01-HL085655  
Title of Grant: Metalloproteinases Control of Mucin Expression in COPD  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator

Years Inclusive: 3/01/2008 - 2/28/2013  
Total Amount Awarded: \$1,958,211  
Years Inclusive: 12/05/2005 - 11/30/2010  
Total Amount Awarded: \$1,526,932

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Funding Agency: National Institutes of Health: National Institute of Allergy and Infectious Disease  
Grant Number: R21-AI070865  
Title of Grant: Genetic Determinants of Host Susceptibility to Pulmonary Anthrax  
Principal Investigator: Jagjit Yadav  
Role on Grant: Co-Investigator  
Years Inclusive: 8/1/2007 - 7/31/2009  
Total Amount Awarded: \$370,000

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Grant Number: P30-ES006096  
Title of Grant: Center on Environmental Genetics  
Principal Investigator: Marshall Anderson  
Role on Grant: Co-Investigator  
Years Inclusive: 4/1/2002 - 3/31/2007  
Total Amount Awarded: \$7,453,839

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Grant Number: R01-0010562  
Title of Grant: Genetic Determinants of Nickel-Induced Lung Injury  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 8/1/2001 - 6/30/2006  
Total Amount Awarded: \$1,518,605

Awarded:

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Funding Agency: National Institutes of Health: National Institute of Allergy and Infection Disease  
Grant Number: R01-AI046556  
Title of Grant: Genetic Determinants of RSV Infection in Mice  
Principal Investigator: James Stark  
Role on Grant: Co-Investigator  
Years Inclusive: 7/1/2001 - 6/30/2006  
Total Amount Awarded: \$1,543,113

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: R01-065612  
Title of Grant: Genetic Determinants of Acute Lung Injury  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/2000 - 6/30/2005  
Total Amount Awarded: \$1,499,089

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Funding Agency: US Environmental Protection Agency  
Title of Grant: Individual STAR Graduate Fellowship  
Principal Investigator: George D. Leikauf (Sponsor)  
Role on Grant: Sponsor  
Years Inclusive: 7/27/2000 - 8/31/2003  
Total Amount Awarded: \$91,872

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: R01-HL065213  
Title of Grant: Murine Models of Occupational COPD  
Principal Investigator: George D. Leikauf

Role on Grant: Principal Investigator  
Years Inclusive: 9/1/1999 - 8/31/2003  
Total Amount Awarded: \$786,869

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: R01-HL0058275  
Title of Grant: Surfactant Deficiency and Air Pollution Susceptibility  
Principal Investigator: George D, Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 9/1/1996 - 8/31/2000  
Total Amount Awarded: \$1,413,213

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Funding Agency: Health Effects Institute  
Title of Grant: Pathogenetics of Particulate Matter  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 8/1/1998 - 7/31/2000  
Total Amount Awarded: \$472,039

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Title of Grant: Short-term Training for Minority Students  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1995 - 6/30/2000  
Total Amount Awarded: \$112,363

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Funding Agency: National Institutes of Health: National Institute Environ. Health Sciences  
Grant Number: R01-ES0006677  
Title of Grant: Acrolein-induced Airway Injury



Principal Investigator: George D, Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1994 - 6/30/1999  
Total Amount Awarded: \$714,036

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Funding Agency: National Institutes of Health: National Institute of General Medical Sciences  
Grant Number: T32-GM008478  
Title of Grant: Host Responses to Trauma: Research Training Program  
Principal Investigator: Joseph S. Solomkin  
Role on Grant: Co-Investigator  
Years Inclusive: 7/1/1992 - 6/30/1997  
Total Amount Awarded: \$659,000

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Grant Number: R01-ES0006562  
Title of Grant: Membrane Ozonolysis and Epithelial Cell Activation  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1992 - 6/30/1997  
Total Amount Awarded: \$767,203

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Grant Number: T32-ES007278  
Title of Grant: Environmental Toxicology: Research Training Program  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1992 - 6/30/1997  
Total Amount Awarded: \$1,026,459

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Funding Agency: Center for Indoor Air Research  
Title of Grant: Formaldehyde-induced Activation of Airway Epithelial Cells  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 3/1/1993 - 10/31/1996  
Total Amount Awarded: \$627,163

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Funding Agency: Glaxo Research Institute  
Title of Grant: Enhanced Expression of Secretory Leukocyte Protease Inhibitor in Airway Epithelial Cells  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/6/1993 - 6/30/1995  
Total Direct Costs: \$10,000

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Funding Agency: Electric Power Research Institute  
Title of Grant: Molecular and Cellular Effects of Oxidant/Acidic Atmospheres in the Airways  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 1/1/1991 - 12/31/1993  
Total Amount Awarded: \$485,000

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Funding Agency: Mickey Leland National Urban Air Toxics Institute  
Title of Grant: A Critical Review of Air Toxics and Asthma  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/30/1993 - 11/30/1993  
Total Amount Awarded: \$43,825

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Funding Agency: The Procter and Gamble Company, University Animal Alternative Approaches Program

Title of Grant: Molecular Approaches to Respiratory Toxicology  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 5/1/1990 - 4/30/1993  
Total Direct Costs: \$150,000

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Funding Agency: Center for Indoor Air Research  
Title of Grant: Indoor Aldehydes and Bronchial Hyperreactivity  
Role on Grant: Principal Investigator  
Years Inclusive: 3/1/1990 - 2/28/1993  
Total Direct Costs: \$526,996

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Grant Number: P30-ES0000159  
Title of Grant: Environmental Health Sciences Center  
Principal Investigator: Roy E. Albert  
Role on Grant: Co-Investigator  
Years Inclusive: 6/1/1987 - 5/31/1992  
Total Amount Awarded: \$4,200,000

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Funding Agency: Health Effects Institute  
Title of Grant: Biochemical Links Between Ozone and Low Molecular Weight Aldehyde Exposure  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 10/1/1990 - 3/31/1992  
Total Direct Costs: \$516,543

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Funding Agency: California Air Resources Board  
Title of Grant: Pilot Studies to Develop Sensitive Markers for Detecting the Health Effects of Acidic Atmospheres  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator

Years Inclusive: 1/1/1990 - 6/30/1991  
Total Amount Awarded: \$119,746

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Funding Agency: National Institutes of Health: National Institute Environmental Health Sciences  
Grant Number: R01- ES004840  
Title of Grant: Reactions of Heavy Metals with Epithelial Cells  
Principal Investigator: Ernest C Foulkes  
Role on Grant: Co-Investigator  
Years Inclusive: 7/1/1988 - 6/30/1991  
Total Amount Awarded: \$452,011

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Funding Agency: Cystic Fibrosis Foundation  
Title of Grant: Research Development in Cystic Fibrosis  
Principal Investigator: Jeffery A Whitsett  
Role on Grant: Co-Investigator  
Years Inclusive: 9/1/1989  
Total Amount Awarded: \$649,000

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Funding Agency: Health Effects Institute  
Title of Grant: Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 9/1/1986 - 8/30/1989  
Total Direct Costs: \$417,760

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Title of Grant: Airway Epithelial Modulation of Airway Smooth Muscle  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator

Years Inclusive: 6/1/1988 - 5/31/1989  
Total Direct Costs: \$8,390

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: P30-HL0024136  
Title of Grant: Neurological Control of Lungs and Airways  
Principal Investigator: Jay A. Nadel  
Role on Grant: Co-Investigator  
Years Inclusive: 7/1/1984 - 6/30/1988  
Total Amount Awarded: \$8,397,335

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Funding Agency: National Institutes of Health: National Heart, Lung, and Blood Institute  
Grant Number: R23-HL0037621  
Title of Grant: Airway Epithelial Cell Secretion: Role of Inflammation  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 4/1/1985 - 3/30/1988  
Total Direct Costs: \$107,500

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Title of Grant: Release of Lipoxygenase Eicosanoids from Cultured Epithelial Cells  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1986 - 6/30/1987  
Total Direct Costs: \$19,865

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Funding Agency: National Institutes of Health: National Institute of Environmental Health Sciences  
Title of Grant: Release of Arachidonic Acid Metabolites from Cultured Airway Epithelial Cells  
Principal Investigator: George D. Leikauf

Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1985 - 6/30/1986  
Total Direct Costs: \$12,500

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Funding Agency: American Lung Association of San Francisco  
Title of Grant: Regulatory Role of Inflammatory Mediators on Ion Transport Across Canine Tracheal Epithelium  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1984 - 6/30/1985  
Total Direct Costs: \$7,400

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Funding Agency: American Lung Association of San Francisco  
Title of Grant: Regulation of the Respiratory Goblet Cell: In Vivo Incorporation of Radiolabelled Macromolecules in the Rabbit  
Principal Investigator: George D. Leikauf  
Role on Grant: Principal Investigator  
Years Inclusive: 7/1/1983 - 6/30/1984  
Total Direct Costs: \$11,000

## OTHER SCHOLARLY ACTIVITIES

### Editorial Board(s)

1992 - 2002 Member, American Journal of Physiology: Lung Cellular and Molecular Physiology  
2004 - 2007 Pulmonary Pharmacology, Member  
2005 - 2016 Associate Editor, American Journal of Respiratory Cell and Molecular Biology  
2017 - Present American of Respiratory Cell and Molecular Biology  
2005 - Present Member, Korean Journal of Internal Medicine

### Manuscript Reviewer

Alcoholism: Clinical & Experimental Research  
American Journal of Kidney Diseases  
American Journal of Medical Sciences  
American Journal of Pathology

American Journal of Respiratory and Critical Care Medicine  
American Review of Respiratory Disease  
American Journal of Physiology: Lung Cellular and Molecular Physiology  
BBA - Molecular Basis of Disease  
Biochemical Pharmacology  
BMC Genetics  
Carcinogenesis  
Cellular Immunology  
Clinical Medicine Insights: Circulatory, Respiratory and Pulmonary Medicine  
Clinical Science  
Critical Care  
Current Respiratory Medicine Reviews  
Environmental Health Perspectives  
Environmental Research  
European Journal of Pharmacology  
European Respiratory Journal  
Experimental Lung Research  
Free Radical Biology and Medicine  
Genome Biology  
Human Genomics  
Immunobiology  
In Vitro Cellular and Developmental Biology  
Inhalation Toxicology  
International Journal of Cancer  
Journal of Applied Physiology  
Journal of Biological Chemistry  
Journal of Cellular and Molecular Medicine  
Journal of Clinical Investigation  
Journal of Pharmacology and Experimental Therapeutics  
Life Sciences  
Mucosal Immunology  
Nanotoxicology  
Neurochemistry International Toxicological Sciences  
Oncogene

Pediatrics Research  
Pharmacogenetics  
Physiological Genomics  
PLoS One  
Pulmonary Pharmacology and Therapeutics  
Regulatory Peptides  
Regulatory Toxicology and Pharmacology  
Journal of Pediatrics  
Toxicological Sciences  
Toxicology  
Toxicology and Applied Pharmacology  
Toxicology and Industrial Health  
Toxicological Sciences

#### **SELECTED RECENT INVITED PRESENTATIONS**

1. **Leikauf** GD. Translational Opportunities from Functional Genomic of Acute Lung Injury. Presented at: Institute for Genomic Sciences and Policy, Duke University; 2005 Sep 12-14; Durham, NC.
2. **Leikauf** GD, Korfhagen T, Dietsch M, Henning LM, Case LM, Prows DR, Wesselkamper SC, Hardie W. Functional Genomics of Acute Lung Injury and Pulmonary Fibrosis. Presented at: Mechanisms of Action of Inhaled Fibers, Particles & Nanoparticles in Lung & Cardiovascular Diseases; 2005 Nov 2-4; Research Triangle Park, NC.
3. **Leikauf** GD. Environmental Genetics of Acute Lung Injury. Presented at: John Doull Toxicology Symposia, University of Kansas; 2006 Sep 21-22; Kansas City, KS.
4. **Leikauf** GD. Oxidant-induced Acute Lung Injury: Transcriptional Profiling. Presented at: “American Physiological Society, Physiological Genomics of Lung Conference; 2006 Oct 4-6; Tampa, FL.
5. **Leikauf** GD. Environmental Genetics of Acute Lung Injury. Presented at: Gordon Research Conference; 2007 Jun 21-25; Colby-Sawyer College, London, NH.
6. **Leikauf** GD, Bein K, Concel VJ, Pope-Varsalona H, Medvedovic M, Sartor M, Hardie W, Korfhagen T, Dietsch M, Liu P, You M, Prows DR. Functional Genomics of Acute Lung Injury. Presented at: Department of Physiology, College of Medicine, University of Pennsylvania; 2007 Oct 21-22; Philadelphia, PA.
7. **Leikauf** GD. Genome Wide Analysis of Acute Lung Injury. Presented at: University of Giessen Lung Center; 2008 Jul 11-15; Giessen, Germany.
8. **Leikauf** GD. Pathways and mechanisms of air pollution-induced lung injury”. Presented at: NIEHS Symposium on Air Pollution Health Effects; 2008 Sep 14-16; Raleigh, NC.
9. **Leikauf** GD. Gene-Environment Interactions: Utility and Uncertainty. Presented at: Symposium on Toxicity Pathway-Based Risk Assessment: Preparing for Paradigm Change. The National Academy of Sciences, 2009 May 6-8; Washington DC.
10. **Leikauf** GD, Ganguly K, Upadhyay S, Bein K, Brant KA, Barchowsky A, Fabisiak J,



- Knoell DL, Prows DR, Sartor M, Medvedovic M, Pope-Varsalona H, Jang AS, Schulz H. Genetical Genomics of Lung Growth, Injury, and Remodeling. Presented at: American Thoracic Society Annual Meeting; 2009 May 12-15; San Diego, CA.
11. **Leikauf** GD, Bein K, Concel VJ, Martin TM, Pope-Varsalona H, Vuga L, Kaminski N, Jang AS, Fabisiak JP, Medvedovic m, Sartor MA, Knoell DL, Prows DR. Gene-Environment Interactions in Chemical-Induced Acute Lung Injury. Presented at: Division of Extramural Research and Training Seminar Series. National Institute of Environmental Health Sciences. 2009 Sep 20-21; Research Triangle Park.
  12. **Leikauf** GD, Bein K, Brant KA, Concel VJ, Berndt A, Vuga L, Kaminski N, Martin TM, Pope-Varsalona H. Keynote Address: Gene-Environment Interactions in Acute Lung Injury. Presented at: Fourth Annual Research Day; 2009 Nov 4-5; The Ohio State University, Columbus, OH.
  13. **Leikauf** GD, Ganguly K, Bein K, Fabisiak JP, Brant KA, Berndt A, Kaminski N, Prows DR, Upadhyay S, Martin TM, Concel VJ, Schulz H. Genetical Genomics of Lung Growth, Injury, and Remodeling. Presented at: Helmholtz Centrum, Institute of Lung Biology; 2009 Nov 11-14; Munich, Germany.
  14. **Leikauf** GD, Bein K, Fabisiak JP, Di Y, Concel VJ, Berndt A, Medvedovic M, Kaminski N, Vuga L, Sartor MA, Martin TM, Pope-Varsalona H, Prows DR. Genomewide Analysis of Susceptibility Genes for Chlorine-induced Acute Lung Injury in Mice. Presented at: American Thoracic Society Annual Meeting; 2010 May 14-19; New Orleans LA.
  15. **Leikauf** GD, Bein K, Brant KA, Di Y, Berndt A, Kaminski N, Vuga L, Ganguly K, Fabisiak JP. We Still Need Mice, Dissecting the Genetics of Acute Lung Injury. Presented at: Pittsburgh Lung Conference; 2011 Oct 10-13; Pittsburgh, PA.
  16. **Leikauf** GD, Bein K, Berndt A, Brant KA, Di Y, Vuga L, Kaminski N, Fabisiak JP. Chemical-induced Acute Lung Injury. Presented at: Lovelace Respiratory Research Institute; 2011 Dec 10-12; Albuquerque, NM.
  17. **Leikauf** GD. Lesions from Mice: Genetics of Acute Lung Injury. Presented at: American Thoracic Society Annual Meeting; 2012 May 17-21; San Francisco, CA.
  18. **Leikauf** GD. Toward a Functional Genome: Genetics of Acute Lung Injury in Mice. Presented at: Pittsburgh Children's Hospital; 2012 Jul; Pittsburgh, PA.
  19. **Leikauf** GD. Phosgene-induced Acute Lung Injury. Presented at: American Thoracic Society Meeting; 2013 May 18-21; Philadelphia.
  20. **Leikauf** GD. Chemical-induced Lung Injury: Acrolein, Chlorine, Ammonia, and Phosgene. Presented at: Korean Society for Occupational Asthma and Lung Disease; 2013 Jun 7-9; Seoul, Korea.
  21. **Leikauf** GD. Functional Genomics of Acrolein-induced Lung Injury. Presented at: Soon Chun Hyang University Hospital; 2013 Jun 14-15; Bucheon, Korea.
  22. **Leikauf** GD. Functional Genomics of Acrolein-induced Lung Injury. Presented at: The Ohio State University; 2014 Apr 14-15; Columbus, OH.
  23. **Leikauf** GD, Ganguly K, Concel VJ, Pope-Varsalona H, Bein K, Brant KA, Di Y, Jang AS, Vuga L, Upadhyay S, Kaminski N, Prows DR, Knoell DL, Berndt A, Martin TM, Fabisiak JP. Functional genomics of chemical induced acute lung injury. Presented at: CounterACT: Countermeasures Against Chemical Threats; 2014 Jun 16-18; Denver, CO.
  24. **Leikauf** GD. Functional Genomics of Acrolein-Induced Acute Lung Injury. Presented at: Division of Pulmonary and Critical Care, Department of Internal Medicine, University of California Davis Medical School, 2014 Nov 10. Davis, CA.

25. **Leikauf** GD, Bein K, Jang AS, Ganguly K, Concel VJ, Liu P, Pope-Varsalona H, Brant KA, Dopico RA Jr, Di YP, Vuga LJ, Li Q, Upadhyay S, Kaminski N, You M, Prow DR, Knoell DL, Berndt A, Martin TM, Fabisiak J. Chemical induced lung injury: acrolein, chlorine, ammonia, and phosgene. Presented at: Department of Human Genetics, Graduate School of Public Health, University of Pittsburgh. 2014 Dec 5. Pittsburgh, PA.
26. **Leikauf** GD. The In's and Out's of Acrolein Toxicity. Presented at: Department of Environmental Health Sciences, Yale School of Public Health, Yale University, 2015 Feb 5. New Haven, CT.
27. **Leikauf** GD. The In's and Out's of Acrolein Toxicity. Presented at Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh. 2015 Apr 9. Pittsburgh, PA.
28. **Leikauf** GD. Chemical-induced Lung Injury: Acrolein, Chlorine, Ammonia, and Phosgene. Presented at: Division of Pulmonary, Critical Care & Sleep Medicine, Department of Internal Medicine, Yale Medical School, 2015 Apr 11. New Haven, CT.
29. **Leikauf** GD. Toxic Response of the Respiratory System. Presented at Mid-Atlantic Toxicology Course. 2015 Apr 20. Kansas City, MS.
30. **Leikauf** GD, Bein K, Ganguly K, Concel VJ, Liu P, Pope-Varsalona H, Brant KA, Dopico RA Jr, Di YP, Jang AS, Dietsch M, Medvedovic M, Vuga LJ, Li Q, Hu Z, Upadhyay S, Kaminski N, You M, Prow DR, Knoell DL, Berndt A, Martin TM, Fabisiak J. Functional Genomics of Chemical-induced Acute Lung Injury. Presented at: CounterACT: Countermeasures Against Chemical Threats; 2015 Jun 16-18; New York, NY.
31. **Leikauf** GD: Functional Genomic Analysis of Acute Lung Injury. Department of Biomedical Informatics. University of Pittsburgh, 2016 Mar 28; Pittsburgh PA
32. **Leikauf** GD, Bein K, Ganguly K, Concel VJ, Liu P, Pope-Varsalona H, Brant KA, Dopico RA Jr, Di YP, Jang AS, Dietsch M, Medvedovic M, Vuga LJ, Li Q, Hu Z, Upadhyay S, Kaminski N, You M, Prow DR, Knoell DL, Berndt A, Martin TM, Fabisiak J. Functional Genomics of Chemical-induced Acute Lung Injury. Presented at: CounterACT: Countermeasures Against Chemical Threats; 2016 Jun 15; Davis, CA.
33. **Leikauf** GD, Bein K, Ganguly K, Concel VJ, Liu P, Pope-Varsalona H, Brant KA, Dopico RA Jr, Di YP, Jang AS, Dietsch M, Medvedovic M, Vuga LJ, Li Q, Hu Z, Upadhyay S, Kaminski N, You M, Prow DR, Knoell DL, Berndt A, Martin TM, Fabisiak J. Functional Genomics of Chemical-induced Acute Lung Injury. Presented at: CounterACT: Countermeasures Against Chemical Threats; 2016 Jun 14 ; Davis, CA.
34. **Leikauf** GD, Bein K, Ganguly K, Concel VJ, Liu P, Pope-Varsalona H, Brant KA, Dopico RA Jr, Di YP, Jang AS, Dietsch M, Medvedovic M, Vuga LJ, Li Q, Hu Z, Upadhyay S, Kaminski N, You M, Prow DR, Knoell DL, Berndt A, Martin TM, Fabisiak J. Functional Genomics of Chemical-induced Acute Lung Injury. Presented at: CounterACT: Countermeasures Against Chemical Threats; 2017 Jun 14; Boston, MA.
35. Martin TM, Ganguly K, Bein K, Concel VJ, Brant KA, Di YP, Jang A-S, Upadhyay S, Fabisiak JP, **Leikauf** GD. Functional Genomics of Ammonia-induced Acute Lung Injury. American Thoracic Society Annual Meeting, 2018, May 14, 2018; San Diego, CA.
36. **Leikauf** GD, Bein K, Ganguly K, Concel VJ, Liu P, Pope-Varsalona H, Brant KA, Dopico RA Jr, Di YP, Jang AS, Dietsch M, Medvedovic M, Vuga LJ, Li Q, Hu Z, Upadhyay S, Kaminski N, You M, Prow DR, Knoell DL, Berndt A, Martin TM, Fabisiak J. Functional Genomics of Chemical-induced Acute Lung Injury. Presented at: CounterACT: Countermeasures Against Chemical Threats; 2018 Jun 14; Denver, CO.

37. **Leikauf** GD. Lung Biology Seminar: Acrolein, the Necessary Toxicant. University of Rochester; 2018 Oct 2, Rochester, NY
38. **Leikauf** GD, Birru RL, Wells H, Bein K. Functional Genomics of Chemical-induced Acute Lung Injury. Presented at: New York Academy of Science, CounterACT: Countermeasures Against Chemical Threats; 2019 Jun 19; New York, NY.

## TEACHING

### Graduate Courses

<b>Year(s)</b>	<b>Course Number &amp; Title</b>	<b>Role</b>
1984	Role of Inflammation in Regulation of Epithelial Ion Transport	Lecturer
1986	The Lung as a Metabolic Organ	Lecturer
1986	Airway Responses to Inhaled Toxicants	
1986	Ozone-Induced Augmentation of Arachidonic Acid Metabolism	Lecturer
1986 - 2007	Respiratory Toxicology	
1987	Respiratory Tract Toxicity: Experimental Aspects	
1987	Chemically-Induced Bronchial Hyperresponsiveness	Lecturer
1987	Biological Responses to Inhaled Aerosols	Lecturer
1987 - 1989	Cellular Aspects of Chloride Transport in Epithelium	Lecturer
1988 - 1989	Air Pollution	Course Director
1988 - 2007	Respiratory Toxicology	Lecturer
1990 - 2007	Biological Effects of Air Pollution	Lecturer
1991	Mediators of Inflammation	
1992 - 1996	Oxidative Stress and Cancer	Lecturer
1994 - 2007	Health Effects of Air Pollution	
1994 - 2007	Respiratory System	Lecturer
1995	Air Pollution: Sources, Dispersion, and Fate	Lecturer
2000 - 2007	Functional Genomics in Pulmonary Biology	Lecturer
2007	Air Pollution and Respiratory Health	Course Director
2008	Specialized Cells, Stem Cells, and Tissue Renewal	Lecturer
2009 - 2010	Individualized Risk Assessment Cells and Genomes Intracellular Compartments	Lecturer
2010	Protein Sorting, and Intracellular Vesicular Traffic	Lecturer
2008-2019	EOH - 2180 Individual Health Risk Assessment	Lecturer
2008-2019	EOH - 2013 Air Pollution and Respiratory Health	Lecturer

	EOH - 2021 - 13149, Special Studies	Primary Instructor
8/27/2012 - 12/15/2012	EOH - 2021 - 15681, Special Studies	Primary Instructor
8/27/2012 - 12/15/2012	EOH - 2108 - 15724, Environmental & Occupational Health Practice	Primary Instructor
8/27/2012 - 12/15/2012	EOH - 2110 - 15715, Rotation/Practicum	Primary Instructor
8/27/2012 - 12/15/2012	EOH - 3010 - 15683, Research and Dissertation PhD	Primary Instructor
1/7/2013 - 4/27/2013	EOH - 2110 - 15087, Rotation/Practicum	Primary Instructor
5/6/2013 - 8/10/2013	EOH - 2021 - 12972, Special Studies	Primary Instructor
8/26/2013 - 12/14/2013	EOH - 2021 - 15243, Special Studies	Primary Instructor
8/26/2013 - 12/14/2013	EOH - 2110 - 15275, Rotation/Practicum	Primary Instructor
8/26/2013 - 12/14/2013	EOH - 3010 - 15245, Research and Dissertation PhD	Primary Instructor
1/6/2014 - 4/26/2014	EOH - 2110 - 14854, Rotation/Practicum	Primary Instructor
1/6/2014 - 4/26/2014	EOH - 3010 - 14821, Research and Dissertation PhD	Primary Instructor
5/5/2014 - 8/9/2014	EOH - 2021 - 12763, Special Studies	Primary Instructor

## **MENTORING AND ADVISING**

### **Master's Students**

<b>Year(s)</b>	<b>Student's Name &amp; Degree/Discipline</b>	<b>Advisor's Role</b>
1985 - 1988	Mary Gooden MS (1988) Risk Assessment of Chlorinated Hydrocarbons	Major Advisor
1987 - 1989	Craig A. Douppnik MS (1989) Modulation of L-type calcium current in bovine adrenal chromaffin cells by protein kinases A & C	Major Advisor
1989 - 1992	Patricia A. Plews MS (1990) Release of endothelin by airway epithelial cells and its effect on chloride secretion	Major Advisor

1990 - 1992	Carol Soo MS (1992) Airway Cell Lipid Metabolism	Major Advisor
1990 - 1993	Amy L. Swiechowski MS (1993) Formaldehyde-induce Airway Hyperreactivity	Major Advisor
1991 - 1993	Lisa Weider MS (1993) Airway Epithelial Cell Responses to Ozone	Major Advisor
1999 - 2001	Scott C. Wesselkamper MS (2001) Genetics of Nickel-induced Acute Lung Injury	Major Advisor
1999 - 2001	Steven Weldert MS (2001) Metal aerosol-induced lung injury	Major Advisor
2003 - 2006	Carmen Venditto MS (2006) Transcriptional signature of metal-induced acute lung injury: role of surfactant protein B.	Major Advisor
2010-2012	Ben Guo MPH (2012) Cold inducible RNA-binding protein (CIRBP) function in acrolein induced acute lung injury	Major Advisor
2013 - 2014	Shuo Cao MPH (2014) Zinc finger, AN-1 domain protein2A – A novel target for lung cancer therapy	Major Advisor

### Doctoral Students

<b>Year(s)</b>	<b>Student's Name &amp; Degree/Discipline</b>	<b>Advisor's Role</b>
1986 - 1990	Hye-Kung Lee PhD (1990) Environmental Health Sciences Electromechanical effects of endothelin in ferret bronchial and tracheal smooth muscle	Major Advisor
1989 - 2001	Susan A. McDowell PhD (2001) Environmental Health Sciences Mediation of nickel-induced acute lung injury by nitric oxide	Major Advisor

1990 - 1994	Joan M. Abbinante-Nissen PhD (1994) Environmental Health Sciences Airway epithelial cells increase secretory leukocyte protease inhibitor transcript levels in response to proteases and glucocorticoids	Major Advisor
1990 – 1995	Shaoying Zhou PhD (1995) Environmental Health Sciences Leukotriene B4 formation: Human neutrophil-airway epithelial cell interactions	Major Advisor
1992 - 1997	Qiyu (Jay) Zhao PhD (1997) Environmental Health Sciences Monocyte chemoattractant protein-1 and ozone-induced monocyte infiltration in rodent lung.	Major Advisor
1993 - 1998	Michael T. Borchers PhD (1998) Environmental Health Sciences Regulation of mucin 5AC in airway mucus overproduction	Major Advisor
2003 - 2007	Hitesh Deshmukh PhD (2007) Environmental Health Sciences Metalloproteinase activation and mucin production in chronic obstructive pulmonary disease	Major Advisor
2015 – 2016	Tamara Tamraj Fulbright International Education Fellowship Superoxide dismutase 3 modulates in lung development	US Sponsor
2014 - 2016	Louis J. Vuga Program in Clinical & Translational Science Possible diagnostic and prognostic biomarkers in idiopathic pulmonary fibrosis and the impact of E2F8 on collagen synthesis	Major Advisor
2014 - 2019	Rahel Birru Environmental Health Sciences Therapeutic development for chemical-induced acute lung injury	Major Advisor
2014 - 2020	Shuo Cao Environmental Health Sciences Arsenic-induced acute lung injury and epithelial cell injury	Major Advisor

### **Predoctoral Fellow**

<b>Year(s)</b>	<b>Student's Name &amp; Degree/Discipline</b>
2017-2018	Natalya Bondarchuk Therapeutics to treat organophosphate neurotoxicity Pre-Doctoral Fellow

2018-2020 Heather Wells  
Design of oximes for the treatment of organophosphate neurotoxicity  
Pre-Doctoral Fellow

**Postdoctoral Fellow Year(s)**

<b>Year(s)</b>	<b>Student's Name &amp; Degree/Discipline</b>
1991 - 1993	Jane Fagerland Post-Doctoral Fellow
1993 - 2001	Leigh G. Simpson Post-Doctoral Fellow
1995 - 2000	Daniel R. Prows Post-Doctoral Fellow
1997 - 1999	Elizabeth Ormerod Post-Doctoral Fellow
2005 - 2007	Scott Wesselkamper Post-Doctoral Fellow

**Mentored Faculty**

<b>Year(s)</b>	<b>Faculty Member's Name &amp; Degree/Discipline</b>
2008 - 2010	An-Soo Jang Visiting Scientist

**SERVICE**

**Service to Internal Organizations**

**Department Committees**

1986 - 2007	Member 1986-1994, Director 1995-2007, Environmental Toxicology Training Program
1987 - 2006	Department Steering Committee
1989 - 1992	Environmental Hygiene Science and Engineering Graduate Teaching Programs
	Chair, External Advisory Committee (Chair): Center for Environmental Health, University of Pittsburgh
	Environmental Toxicology Graduate Admissions Committee
	Graduate Education Steering Committee
	Inhalation and Aerosol Studies Research Group, Co Coordinator
	Instrumentation Committee
	Re-appointment, Promotion, and Tenure Committee, University of

Cincinnati  
 Strategic Planning Committee  
 Department of Environmental and Occupational Health, Promotion and  
 Appointment Committee  
 Chair, Faculty Search Committee

**School/University Committees**

1992 - 1996	Internal Advisory Committee-Member, Center for Children’s Environmental Health and Disease Prevention
2009 - 2016	Member, Faculty Appointment, Promotion, and Tenure Committee
1990-2007	All-University Graduate Faculty - University of Cincinnati
1990 - 2000	Research Council Student Summer Research Fellowships, Life Sciences Committee, University of Cincinnati
1989 - 1999	Bio-Engineering Innovative Research Program, University of Cincinnati
2000 - 2005	Environment and Occupational Health (M4) Committee, University of Cincinnati
1990 - 2007	Graduate Student Grievance Review Committee, Facilitator, University of Cincinnati
1999	Laboratory Medicine and Animal Care Scientific Advisory Committee, University of Cincinnati
1995 - 2001	Committee on Research, College of Medicine, University of Cincinnati
2001	Department of Environmental Health Director Search Committee, College of Medicine, University of Cincinnati
1987-2013	Judge, Graduate Studies Research Forum
1995	Residency Review Committee for Pediatrics, College of Medicine, University of Cincinnati
2001	Allergy & Immunology, Children’s Hospital Research Foundation, Strategic Planning Committee
2002	Internal Advisory Board, Program Project Grant: Surfactant Homeostasis in Health and Disease
2007	Millennium Funds Committee, University of Cincinnati
2010	Chair, Department of Epidemiology Chair Search Committee
2010	Member, Department of Biostatistics Chair Search Committee
2010-2016	Member, Faculty, Appointment, Promotion, Tenure Committee, Graduate School of Public Health
2017-2020	Member, Graduate Students Admissions Committee, Department of Environmental Health



## **Service to External Organizations**

### **Professional Practice**

- 1989 - 1991 President, Ohio Valley Branch of Tissue Culture Association
- 1992 - 1997 Coordinator, Oxidative Stress Toxicology Research Core, Center for Environmental Genetic, NIEHS
- 1992 - 1997 Member, Internal Advisory Committee, Center for Environmental Genetic, NIEHS
- 1992 - 1997 Member, Pilot Projects Peer Review Panel, Center for Environmental Genetics, NIEHS
- 1997 Coordinator, Respiratory Toxicology Research Core, Center for Environmental Genetics, NIEHS
- 1997 Member, National Institutes of Health, Center for Scientific Review Advisory Committee
- 1997 Member, National Institutes of Health, Pulmonary Sciences IRG Study Section Boundary Team
- 1997 Member, Program Committee, American Thoracic Society
- 2004 - 2007 Adjunct Scientist, Lovelace Respiratory Research Institute

### **Scientific Peer Review Panels**

- 1987 - 2006 Member, Arizona Disease Control Research Commission Health Effects of Environmental Pollution Panel
- 1987 - 2014 Member, Arizona Disease Control Research Commission: Respiratory Disease Panel
- 1989 Member, American Lung Association of Ohio
- 1989, 1995 Member, Veterans Administration Biomedical Research Program
- 1989 – 1991 Member, US Environmental Protection Agency - Health Effects Panel
- 1992 Section Chair, US Environmental Protection Agency - Health Effects Panel
- 1990 - 2016 Member Health Effects Institute Review Panel
- 1991 - 1998 Member, National Institute of Occupational Safety and Health Study Section
- 1992 - 1994 Member, National Institutes of Health: Special Study Sect. 3 on Small Business Innovation Research
- 1994 Member, Biomedical Collaborative Studies - Bioengineering and Medicine
- 1994 - 2000 Member, Cystic Fibrosis Research, Inc.
- 1995 - 1999 Member, National Institutes of Health: Respiratory and Applied Physiology Study Section
- 1995 - 2000 Member, US Environmental Protection Agency - Ozone Health Effects Panel

- 1995 - 2003 Member, National Institutes of Health: Lung Biology & Pathology A: Study Section
- 1996 Member, National Institutes of Health: Biological and Physiological Sciences Special Emphasis Panel
- 1997 Member, National Institutes of Health: NIEHS Special Emphasis Panel: Oxidative Stress
- 1998 Member, National Institutes of Health: NIEHS Special Emphasis Panel: Chemical Mixtures in Environmental Health
- 1998 Member, National Institutes of Health: NIEHS Special Emphasis Panel: Structure-Function Relationship in Environmentally-Relevant Genetic Variants
- 2000 Chairperson, National Institutes of Health: NIEHS Special Emphasis Panel ZES1 LKB-C
- 2000 Member, National Institutes of Health: NIEHS Special Emphasis Panel: Transition to Independent Position (TIP)
- 2001 Member, National Institutes of Health: Alcohol Toxicology: Altox 4: Study Section
- 2001 Member, National Institutes of Health: Special Study Section on Asthma SCOR
- 2001 Chairperson, National Institutes of Health: Special Study Section on Allergy, Immunology, and Asthma SCOR
- 2001 Chairperson, National Institutes of Health: NIEHS Special Emphasis Panel: ZES-1 BKW-A Site Visit
- 2002 Member, National Institutes of Health: NHLBI: Sciences Special Emph. Panel: Trial Assessing Innovative Strategies to Improve Clinical Practice through Guidelines in Heart, Lung and Blood Diseases
- 2002 Chairperson, National Institutes of Health: NIEHS Special Emphasis Panel: Environmental Health P30 Center Grant Site Visit
- 2002 Member, National Institutes of Health: NIEHS Special Emphasis Panel: Functional Proteomics: Application to Environmental Health Research
- 2002 - 2006 Member, California Tobacco-Related Disease Research Program, University of California
- 2003 Member, National Institutes of Health: Special Study Section on Acute Lung Injury SCCOR
- 2003 Member, US Environmental Protection Agency - Human Studies Division, National Health and Environmental Effects Research Laboratory
- 2003 Review Panel Member, US Environmental Protection Agency - Air Criteria for Ozone and Related Photochemical Oxidants
- 2003 - 2007 Chairperson, National Institutes of Health: Lung Injury, Repair & Remodeling

- 2006 Member, National Institutes of Health: NIEHS Special Emphasis Panel: Director's Challenge Award Program
- 2006 Member, National Institutes of Health: NIEHS Special Emphasis Panel ZES-1 TN-E
- 2007 Member, National Institutes of Health: NIEHS Special Emphasis Panel: ZES-1 JABC (DI) Disease Investigation through Specialized Clinical Oriented Ventures in Environmental Research (Discover)
- 2012 Member, National Institutes of Health: NIEHS Special Emphasis Panel: Tobacco Centers of Regulatory Science for Research Relevant to the Family Smoking Prevention and Tobacco Control Act (P50)
- 2012 – 2013 Member, National Institutes of Health: NHLBI Special Emphasis Panel ZRG-1 GGG\_A (50): Integrative Omics Data Analysis for Discovery in Lung Disease
- 2013 Member, Center for Research Excellence Environmental and Respiratory Health, Agency for Science and Higher Education, Croatia
- 2014 - 2015 Member, National Institutes of Health: NHLBi Program Project Review Committee, Initial Review Group
- 2014 Member, American Institute of Biological Sciences, Flight Attendants Medical Research Institute (FAMRI) Peer Review COPD 1
- 2014 Reviewer, Arizona Disease Control Research Commission Health Effects of Environmental Pollution Panel
- 2015 Reviewer, Health Effects Institute, Boston MA
- 2015 Chairperson, National Institutes of Health: NIEHS Special Emphasis Panel ZEG-1 HDM-S 50 Centers of Excellence for Environmental Health Disparities Research
- 2015 Reviewer, French National Institute of Health and Medical Research
- 2015 Member, US Environmental Protection Agency, Science To Achieve Results (STAR) Fellowship Peer Review Committee
- 2015 Member, American Institute of Biological Sciences, Flight Attendants Medical Research Institute (FAMRI) Peer Review COPD 1
- 2015 Member, US Army Medical Research and Medical Command: Congressionally Directed Medical Research Program: Peer-Reviewed Medical Research Program
- 2016 Member: NIH: National Institute of Environmental Health Sciences: Immunity, Inflammation, and Disease Laboratory Review Panel
- 2016 Chairperson, National Institutes of Health: Special Emphasis Panel ZRG BBBP-T (50) Impact of Aging on Currently Employed Animal Models of Disease and Chronic Conditions

- 2016 Member, US Army Medical Research and Medical Command: Congressionally Directed Medical Research Program: Peer-Reviewed Medical Research Program
- 2016 Member, National Institutes of Health: Special Emphasis Panel ZRG1 CVRS-S (02) Member Conflict: Lung Injury, Repair, and Regeneration
- 2017 Member, National Institute of Occupational Safety and Health: World Trade Center Cooperative Research Agreements Special Emphasis Panel
- 2017 Member, Department of Defense Peer Reviewed Medical Research Program: Congressionally Directed Medical Research Program: Investigator-Initiated Research Award Pre-Application.
- 2017 Reviewer, French National Institute of Health and Medical Research, Excellence of Science Program
- 2017 Member, National Institutes of Health: Special Emphasis Panel ZHL1 QSR-Q (F4) NHLBI TOPMed Data Analysis
- 2017 - 2018 Member, Department of Defense Peer Reviewed Medical Research Program: Congressionally Directed Medical Research Program: Discovery Award
- 2017 - 2020 Member, Tobacco Related Disease Research Program, Pulmonary Biology and Lung Diseases Review Panel
- 2019 Co-Chairperson, National Institutes of Health: Special Emphasis Panel ZRG1 OBT-M (50) CA19-009: US-China Collaborative Biomedical Research
- 2019 Member, Graduate Women in Science (GWIS), National Fellowship Program
- 2020 Member, National Institutes of Health, CounterACT Study Section

**Scientific Advisory Boards/Committee**

American Physiological Society: Perkins Memorial Fund Committee  
 American Thoracic Society: Program Committee  
 Arizona State University: Design and Scientific Merit of Variable Atmosphere Laboratory  
 Center for Environmental Health, Oregon State University, Corvallis, OR, External Advisory Committee (Chair):  
 International Advisory Committee: Eighth and Ninth Inhalation Symposium, Hanover, Germany  
 Mouse Phenom Project: The Jackson Laboratory, Participating Investigator  
 National Academy of Science, National Research Council, Board on Environmental Studies and Toxicology, Board on Life Science, Committee on Applications of Toxicogenomics Technologies to Predictive Toxicology  
 National Institutes of Health, Center for Scientific Review Advisory Committee  
 National Institutes of Health, National Institute for Environmental Health Sciences, National Advisory Environmental Health Sciences Council  
 Superfund Research Center, Louisiana State University, Baton Rouge, LA, External Advisory Committee (Chair)