

BIOGRAPHICAL SKETCH

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NAME George D. Leikauf, Ph.D.	POSITION TITLE Professor		
eRA COMMONS USER NAME GEORGE_LEIKAUF			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of California, Berkeley, CA	A.B.	1973	Biological Sciences
New York University Medical Center, New York, NY	M.S.	1978	Environ. Health Sciences
New York University Medical Center, New York, NY	Ph.D.	1981	Environ. Health Sciences
University of California, San Francisco, CA	Postdoc	1985	Respiratory Physiology

A. Positions and Honors**Positions and Employment**

1985-1986 Research Asst. Professor, Dept of Environmental Medicine, New York University, NY, NY
 1988 Visiting Scientist, Depts of Toxicology & Physiological Chemistry, Karolinska Institute, Stockholm, Sweden
 1986-1990 Assistant Professor, Department of Environmental Health, University of Cincinnati, Cincinnati, OH
 1990-1998 Associate Professor, Department of Environmental Health, University of Cincinnati, Cincinnati, OH
 1995-1998 Director, Environmental Toxicology Graduate Program, University of Cincinnati, Cincinnati, OH
 1996-2005 Director, Molecular Toxicology and Env Genetics Division, University of Cincinnati, Cincinnati, OH
 1998-2008 Professor, Department of Environmental Health, University of Cincinnati, Cincinnati, OH
 1998-2008. Professor (Adjunct), Pulm Critical Care Med, Dept. Med, University of Cincinnati, Cincinnati, OH
 2004-2007 Deputy Director, Center for Environmental Genetics, University of Cincinnati, Cincinnati, OH
 2007-Pres Professor, Depart. of Environmental & Occupational Health, University of Pittsburgh, Pittsburgh, PA

Other Experience

NIH Study Sections: Lung Biology & Pathology A (Ad hoc 1995, 2000, Member 2002-2003), Small Business Innovation Research (1992, 1994), Resp Appl Physiol (1995-1999), Safety Occup Health (1998), AITox4 (2001), Asthma NHLBI SCORs (2001), Allergy & Immun SCORs (Chairperson 2001), Acute Lung Injury SCCOR (2003), Lung Injury Repair and Remodeling (Chairperson 2003-2006). *NIH: Special Emphasis Panels:* Biol & Physiol Sci (1996), Oxidative Stress (1997), Chem Mixtures in Env Hlth (1998), Structure-Function Rel Env-Relevant Genetic Variants (1998), Training Programs (Chairperson, 2000), TIP awards (2000), NIEHS Program Project Grant (Site Visit Chairperson, 2001, 2006), NIEHS Center (Site Visit Chairperson, 2002), Proteomics (2002), NIEHS Discover Centers (Member 2007) *Other Agencies:* USEPA: Health Effects (1989-92, Chair 1992); Ozone Hlth Eff. (1995-2000), Particulate Matter Hlth Eff (1996-2003.), Urban Air Tox (1995-2001), ALA Ohio; Ariz Dis Cont Res Comm, CF Research, Health Effects Institute, VA Biomed. Res *Advisory Committees:* National Academy of Science: Genomics Proteomics, and Bioinformatics Committee; American Physiological Society: Perkins Memorial Fund Committee; American Thoracic Society: Program Committee; Mouse Phenome Project, Jackson Laboratory; National Advisory Environmental Health Sciences Council, National Institute of Environmental Health Sciences

Honors

NIEHS Graduate Individual Fellowship; NHLBI Postdoctoral Fellowship; Strobel Medical Research Fund Award, ALA of San Francisco; CF Fellow, Cystic Fibrosis Found; New Invest NHLBI; Morgareidge Award, International Life Sciences Institute.

B. Selected Peer-Reviewed Publications

Prows DR, Daly M, Sidman C, Shertzer H, Leikauf GD: Genetic analysis of ozone-induced acute lung injury in sensitive and resistant strains. *Nature Genetics* 17:471-74, 1997
 Lee JJ, McGarry MP, Denzle KL, Larson KA, Farmer SC, Carrigan P, Brennelsen J, Horton M, Gelfand EW, Leikauf GD, Lee NA: IL-5 expression in lung epithelium of transgenic mice leads to changes pathognomonic of asthma. *J Exptl Med* 185:2143-56, 1997
 Prows DR, Daley MJ, Shertzer HG, Leikauf GD: Ozone-induced acute lung injury. *Am J Physiol.* 277: L372-80, 1999
 Wesselkamper SC, Prows DR, Biswas P, Willeke K, Bingham E, Leikauf GD: Genetic susceptibility to irritant-induced lung injury in mice. *Am J Physiol.* 279: L575-82, 2000

- 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. *Inhalation Toxicol.* 12: 59-73, 2000
- McDowell SA, Gammon K, Bachurski CJ, Weist 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.* 23:466-474, 2000
- Prows DR, Leikauf GD: QTL analysis of Ni-induced acute lung injury in mice. *Am J Respir Cell Mol Biol.* 24: 740-6, 2001
- Leikauf GD, McDowell SA, Wesselkamper SC, Miller CR, Hardie WD, Biswas P, Gammon K, 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* 105:5-57, 2001
- 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.* 500:479-87, 2001
- McDowell SA, Mallakin A, Bachurski CJ, Toney-Earley K, Prows DR, Bruno T, Kaestner KH, Witte DP, Degen SJF, Leikauf GD, Waltz SE: The role of the receptor tyrosine kinase Ron in acute lung injury. *Am J Resp Cell Mol Biol.* 26:99-104, 2002
- Leikauf GD, McDowell SA, Bachurski CJ, Aronow BJ, Gammon K, Wesselkamper SC, Hardie WD, Wiest JS, Leikauf JE, Korfhagen TR, Prows DR: Acute Lung Injury: Functional genomics and genetic susceptibility. *Chest* 121: 70-5S: 2002
- Hardie WD, Prows DR, Piljan-Gentle A, Wesselkamper SC, Leikauf GD, Korfhagen TR: Dose-related protection from Ni-induced lung injury in transgenic mice expressing human TGF- α . *Am J Respir Cell Mol Biol.* 26: 430-7, 2002
- Leikauf GD, Borchers MJ, Prows DR, Simpson LG: Mucin apoprotein of COPD. *Chest* 121:166-82S, 2002
- Stark JA, McDowell SA, Koenigsnecht V, Prows DR, Leikauf JE, LaVine MA, Leikauf GD: Genetic susceptibility to respiratory syncytial viral infection in inbred mice. *J Med Virology* 67: 92-100, 2002
- McDowell SA, Gammon K, Zingarella B, Bachruski CJ, Prows DR, Leikauf GD: Inhibition of nitric oxide restores surfactant gene expression during acute lung injury. *Am. J. Respir. Cell Mol. Biol.* 28:188-98, 2003
- Prows DR, McDowell SA, Aronow BJ, Leikauf GD: Genetic susceptibility to nickel-induced acute lung injury. *Chemosphere* 51:1139-1148, 2003
- 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* 28:682-96, 2003
- 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* 171:305-14, 2005
- Leikauf GD, Deshmukh HS: When wheeze leads to squeeze: growth under pressure. *Am J Respir Cell Mol Biol* 32:366, 2005
- 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 TGF-beta. *Am J Respir Crit Care Med.* 172:1399-411, 2005.
- Mallakin A, Kutcher LW, McDowell SA, Kong S, Schuster R, Lentsch AB, Aronow BJ, Leikauf GD, Waltz SE: Expression profiles of Mst1r deficient mice during Ni-induced acute lung injury. *Am J Resp Cell Mol Biol* 34: 15-28, 2006.
- 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* 34: 73-82, 2006.
- 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.* 7:538-55, 2006.
- Hardie W. D., Korfhagen T. R., Sartor M.A., Prestridge A., Medvedovic M., Le Cras T.D., Ikegami M., Wesselkamper S.C., Davidson C, Dietsch M, Nichols W, Whitsett J.A. Leikauf G.D. Genomic Profile of Matrix and Vasculature Remodeling in TGFalpha-induced Pulmonary Fibrosis. *Am J Respir Cell Mol Biol.* 37:309-21, 2007.
- Ganguly K, Stoeger T, Wesselkamper SC, Reinhard C, Sartor MA, Medvedovic M, Tomlinson CR, Bolle I, Mason JM, Leikauf GD, Schulz M D H. Candidate genes controlling pulmonary function in mice: transcript profiling and predicted protein structure. *Physiol Genomics.* 31:410-421. 2007.
- Tichelaar JW, Wesselkamper SC, Chowdhury S, Yin H, Berclaz PY, Sartor MA, Leikauf GD, Whitsett JA. Duration-dependent cytoprotective versus inflammatory effects of lung epithelial fibroblast growth factor-7 expression. *Exp Lung Res.* 33:385-417, 2007.
- Prows DR, Hafertepen AP, Winterberg AV, Gibbons Jr WJ, Wesselkamper SC, Singer JB, Hill AE, Nadeau JH, Leikauf GD. Reciprocal Congenic Lines of Mice Capture the Aliq1 Effect on Acute Lung Injury Survival Time. *Am J Respir Cell Mol Biol.* 38:68-77, 2008
- Borchers MT, Wesselkamper SC, Harris NL, Deshmukh H, Beckman E, Vitucci M, Tichelaar JW, Leikauf GD. CD8(+) T cells contribute to macrophage accumulation and airspace enlargement following repeated irritant exposure. *Exp Mol Pathol.* 2007 [Epub ahead of print]
- Deshmukh HS, Shaver C, Case LM, Dietsch M, Wesselkamper SC, Hardie D, Korfhagen TR, Corradi M, Nadel JA, Borchers MT, Leikauf GD. Acrolein-activated matrix metalloproteinase 9 contributes to persistent mucin production. *Am J Respir Cell Mol Biol.* 2007; [Epub ahead of print]