BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME	POSITION TITLE
Luis Alberto Ortiz	Associate Professor and Director Division of Occupation and Environmental Medicine University of Pittsburgh
eRA COMMONS USER NAME Lao1@pitt.edu	

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
Instituto Jorge Robledo. Medellin, Colombia	B.S.	1976	Biologic Sciences
Universidad Pontificia Bolivariana. Medellin, Colombia	M.D.	1983	Medicine

Please refer to the application instructions in order to complete sections A, B, and C of the Biographical Sketch.

A. Positions and Honors.

Positions and Employment

1983-1984 Compulsory Social Service (Physician In Rural Area. Arauca, Colombia)
1984-1987 Resident in Internal Medicine, Department of Medicine,
Universidad Pontificia Bolivariana, Medellin, Colombia.
1987-1990 Resident in Internal Medicine, Department of Medicine,
Tulane University Health Science Center, New Orleans, LA.
1990-1993 Fellow and Clinical Instructor, Division of Pulmonary and Critical Care Medicine.
University of Texas Health Science Center at Houston, Houston, TX
1993-1999 Assistant Professor of Medicine, Section of Pulmonary Diseases, Critical Care, and
EnvironmentalMedicine. Tulane University Health Science Center, New Orleans, LA.
1999-2002 Associate Professor of Medicine (Tenure), Section of Pulmonary Diseases, Critical Care, and
EnvironmentalMedicine. Tulane University Health Science Center, New Orleans, LA.
2002-2005 Associate Professor and Director (Tenure),
Division of Occupational and Environmental Medicine.
Department of Environmental and Occupational Health
University of Pittsburgh, Pittsburgh, PA.

Honors

1994 Fellow, American College of Chest Physicians
1995 NIH Clinician Scientist Development Award (K08)
1998 Southern Society for Clinical Investigation
2003 Member Lung Injury, Repair and Remodeling (LIRR) Study section
2007 United States Environmental Protection Agency. Advisory Board on Asbestos

B. Selected peer-reviewed publications (pertinent to this application).

1. **Ortiz, L.A.**, Gambelli, F., McBride, C., Gaupp, D., Baddov, M., Kaminski, N., and Phinney, D. Mesenchymal Stem Cell Engraftment in Lung is Enhanced in Response to Bleomycin Exposure and Ameliorates its Fibrotic Effects. Proceedings of the National Academy of Sciences (PNAS) USA. 100(14):8407-8411, 2003.

2. Gambelli, F., Friedman, M., Hammond, T., Riches, D., and **Ortiz, L.A.** Phosphorylation of Tumor Necrosis Factor Receptor 1 protects macrophages from silica-induced apoptosis. J Biol Chem. 279:2020-2029, 2004
3.Pitt, B., and **L.A. Ortiz.** Stem cells in lung biology. Am J Physiol: Lung Cellular and Molecular Physiology. 286(4):L621-3, 2004.
4. Reynolds, S., Giangreco, A., Hong, K., McGrath, K., Ortiz, L.A., and Stripp, B. Airway injury in the pathophysiology of lung disease: Selective depletion of airway stem and progenitor cells potentates inflammation and alveolar dysfunction. Am J Physiol Lung Cell Mol Physiol. 2004 Dec;287(6):L1256-65. Epub 2004 Aug 06. PMID: 15298853 [PubMed - indexed for MEDLINE]
5.Serinkan, B.F., Gambelli, F., Potapovich, A.I., Babu, H., DiGiuseppe, M., **Ortiz, L.A.,** Fabisiak, J.P., and Kagan V.E. Apoptotic cells quench production of reactive oxygen and nitrogen species by activated macrophages: differential role of phosphatidylserine signaling. Cell Death Differ. 2005 Apr 29.
6. Reynolds, S., Shen, H., Reynolds, P., Betsuyaku, T., Pilewski, J.M., Gambelli, F, DiGiuseppe, M., **Ortiz, L.A.** and B. Stripp. Molecular and Functional Properties of lung side population cells. Am J Physiol Lung Cell Mol Physiol. 2007 Jan 12; [Epub ahead of print] PMID: 17142352 [PubMed - as supplied by publisher].
7. **Ortiz, LA.,** F. Gambelli, G.W. Hoyle, G. Lungarella, S.E. Studder, T. Richards, S. Yousem, K. McCurry, K. Feghali-Bostwick, J. Dauber, and N. Kaminski. 2007. Systemic, but not lung specific, inhibition of TNF receptor mediated activation of NFκB protects form silicosis. In Revision Plos One.
8. **Ortiz, L.A.**, Fattman, C., Dutreil, M., and Phinney, D. Murine Mesenchymal stem cells block T-cell proliferation via production of Interleukin 1 receptor antagonist. Proc Natl Acad Sci U S A. 2007 Jun 26;104(26):11002-7. Epub 2007 Jun 14.
9. Fattman, C., Torres, G., Brockway, B.L., Stripp, B.R., and **Ortiz, L.A.** Remodeling of the respiratory unit in silica-exposed mice. Proceedings of the American Thoracic Society 5(3): 375, 2008.
10. Weiss, D. J., Kolls, J.K., **Ortiz, L.A.**, Panoskaltsis-Mortari, A., and Prockop, D.J. Stem cells and cell therapies in lung biology and lung diseases. Proc American Thoracic Society 5(5): 637-667, 2008.

C. Research Support. Ongoing Research Support

1 R01 ES010859-01A1 Luis A. Ortiz (PI) 07/01/08-06/30/13
NIEHS. Silica-induced TNF-alpha signal transduction.
The major goals of this project are: **1)**. To determine whether inhibition of NF-κB activation in alveolar epithelial type II cells will exacerbate silica-induced lung injury in mice. **2)**. To determine whether inhibition of ERK-mediated phosphorylation of TNF receptors will exacerbate silica-induced lung injury. **3)**. To determine whether overexpression of Tissue Inhibitor of Metalloproteinase 1 (TIMP-1) in mouse lung exacerbates silica-induced lung injury. Role: PI

1 RO1 HL071953-01A1 Luis A. Ortiz (PI) 07/01/05-06/30/09
NHLBI. Mesenchymal Stem Cells (MSCs) in the Treatment of Lung Fibrosis
This research proposal address the mechanisms responsible for the mechanisms of bone marrow-derived MSCs homing and differentiation in the injured lung. In particular it study the role of BMP receptors in regulating the program of epithelial differentiation and the role of Osteopontin as a mediator for homing to distal airway epithelium. This proposal also studies the potential of MSCs as vectors to deliver therapeutic genes to restore homeostasis in the injured lung. Role: PI