BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Troy Stevens

eRA COMMONS USER NAME (credential, e.g., agency login): TROY_STEVENS

POSITION TITLE: Lenoire Locke Professor and Chair, Physiology and Cell Biology

Director, Center for Lung Biology

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Chadron State College, Chadron, NE	B.S.	1986	

Honors and Professional Service (selected examples):

1995-1998 Parker B. Francis Fellowship Award for Research in Pulmonary Medicine.

1996 Giles Filley Memorial Award for Research in Respiratory Physiology and Medicine.

1999-present Member, Editorial Board (1999-present); Associate Editor (2006-2012), American Journal of

Physiology: Lung Cellular and Molecular Physiology.

2001 US Delegate for US-Russia Symposium on Basic Research in Cardiovascular and Pulmonary

Diseases, Moscow, Russia.

2002 US Delegate for US-Italy Symposium on Pathophysiology and Therapeutic Approaches for

Vascular Remodeling, Atlanta, GA, USA.

2003-2007 Associate Editor of "Microvascular Research" for Elsevier Science.

2003-2007 Member, Respiratory Integrative Biology and Translational Research Study Section, NIH

2008-present Ad hoc Reviewer, Respiratory Integrative Biology and Translational Research Study Section,

and various PPG Special Emphasis Panels, NIH

2014-present Pulmonary Circulation Assembly Chair, American Thoracic Society

C. Contribution to Science (* denotes active and former students)

Complete List of Published Work in MyBibliography:

http://www.ncbi.nlm.nih.gov/pubmed?term=troy+stevens&cmd=DetailsSearch&log\$=activity

1. Lung endothelium is heterogeneous in structure and function. The structure and function of endothelium along the pulmonary arterial-capillary-venous axis varies significantly. We have studied the vascular segment-specific endothelial structure-function relationship in an attempt to understand how cellular origin and

- 3b. Cioffi DL*, Moore TM*, Schaack J, Creighton JR*, Cooper DMF, and *Stevens* T*. Dominant regulation of inter-endothelial cell gap formation by calcium inhibited type 6 adenylyl cyclase. <u>J. Cell Biol.</u>, 157: 1267-1278, 2002.
 3c. Creighton JR*, Masada N, Cooper DMF, and *Stevens* T*. Coordinate regulation of membrane
- **3c.** Creighton JR*, Masada N, Cooper DMF, and **Stevens T***. Coordinate regulation of membrane cAMP by calcium inhibited adenylyl cyclase and phosphodiesterase activities. <u>Am. J. Physiol.-</u> Lung Cell. Mol. Physiol., 284: L100-

We are examining the nature of these endothelial amyloids, mechanisms leading to their production and release, and their bio-distribution during critical illness. Examples of this work include:

- **5a.** Morrow KA*, Ochoa CD*, Alexeyev M, Balczon R, Frank DW, and **Stevens T**. *Pseudomonas aeruginosa* exoenzymes U and Y induce a transmissible endothelial proteinopathy. <u>Am. J. Physiol. Lung Cell. Mol. Physiol.</u>, 310: L337-L353, 2016. PMCID: PMC4754902
- **5b.** Balczon R, Morrow KA*, Zhou C, Edmonds B, Alexeyev M, Pittet JF, Wagener BM, Moser SA, Leavesley S, Zha X, Frank DW, and **Stevens T**. *Pseudomonas aeruginosa* infection liberates transmissible, cytotoxic prion amyloids. <u>FASEB J.</u>, 31: 2785-2796, 2017. PMCID: PMC5471513
- **5c.** Lin MT, Balczon R, Pittet JF, Wagener BM, Moser SA, Morrow KA*, Voth S*, Francis CM*, Leavesley S, Bell J, Alvarez DF*, and **Stevens T**. Nosocomial pneumonia elicits an endothelial