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## BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.  
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NAME: Troy Stevens

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eRA COMMONS USER NAME (credential, e.g., agency login): TROY\_STEVENS

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POSITION TITLE: Lenoire Locke Professor and Chair, Physiology and Cell Biology  
Director, Center for Lung Biology

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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.)*

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INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	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](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. J. Cell Biol., 157: 1267-1278, 2002.
- 3c.** Creighton JR\*, Masada N, Cooper DMF, and **Stevens T\***. Coordinate regulation of membrane cAMP by calcium inhibited

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. Am. J. Physiol. Lung Cell. Mol. Physiol., 310: L337-L353, 2016. PMID: 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. FASEB J., 31: 2785-2796, 2017. PMID: 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