

Investigator:	<b>Roy Sutliff</b> Phone: (404) 321-6111 ext. 207053 Email: rsutlif@emory.edu
Primary Research Interest:	Physiology
Description of Research:	Vascular reactivity is a major determinant of physiological parameters such as blood pressure. Constriction of the vessel results in an increased blood pressure whereas, dilation of the vessel decreases blood pressure. Endothelial cells line the blood vessel and can regulate diameter of blood vessels by releasing agents that constrict or relax vascular smooth muscle cells. Research in my laboratory focuses on examining the interaction between endothelial cells and vascular smooth muscle cells and how certain pathophysiological conditions impair vascular function. The two areas that are most heavily studied are the cardiovascular effects of AIDS and AIDS therapeutics and the cardiovascular effects of alcohol as part of an Alcohol Center. In addition, studies examining the impact of transcription factors (i.e. PPAR) on cardiovascular function are ongoing. Our laboratory uses an integrative approach to study these models with everything from projects involving whole animal physiology to understand the effects of these models on blood pressure or pulmonary hypertension, to isolated tissue studies examining vascular contractility, to cellular preparations to examine biochemistry.
Relevance to VA:	Endothelial dysfunction is associated with numerous diseases such as atherosclerosis, pulmonary hypertension and diabetes. These diseases are prevalent in the VA population. A better understanding of the mechanisms for the development and progression of endothelial dysfunction could lead to new more specific therapeutics for the the treatment of cardiovascular diseases.