

# Luis Martinez-Lemus

**University of Missouri researcher  
Dr. Luis Martinez-Lemus provides insights  
into the changing physiology of blood vessels.**

Martinez-Lemus first became interested in vascular biology while trying to understand why pulmonary hypertension develops in poultry, causing issues for animals and farmers. Studying the processes behind the disease captured his interest in microcirculation: circulation of blood in the body's smallest blood vessels.

At MU, Martinez-Lemus' research is focused on the mechanisms responsible for structural changes to blood vessels — a process known as vascular remodeling. Vascular remodeling is a hallmark for numerous cardiovascular diseases, yet is not fully understood by scientists. Using sophisticated imaging instruments, Martinez-Lemus studies how blood vessels respond to diverse stimuli. His studies indicate that cells within vascular walls are more adaptable than was previously known, changing position in as little as four hours.

In recognition of his research expertise, Martinez-Lemus received the American Physiological Society Research Career Enhancement Award. He is a member of the European Society for Microcirculation, the American Physiological Society, the Poultry Science Association and the Microcirculatory Society. Martinez-Lemus also serves on the editorial board for *Microcirculation* and *Frontiers in Vascular Physiology* and acts as reviewer of several physiological journals.

Dr. Luis Martinez-Lemus is an associate professor of medical pharmacology and physiology in the School of Medicine and an investigator at Dalton Cardiovascular Research Center.

