

Thomas E. Dick, Ph.D.

Associate Professor of Medicine, Case

Education:

Ph.D. - Texas Tech University School of Medicine

Professional Training:

Fellowship - University of Washington

Area of Expertise:

Neural Control of Breathing.

Memberships:

Society of Neuroscience

American Physiologic Society.

Publications:

Dr. Dick's most recent publication focused on neurons that generate the breathing pattern also express activity highly correlated to arterial pulse. These data speak to the coordination of the sympathetic and respiratory system in the control of gas exchange.

Research:

Currently his research is focusing on sympathetic nerve activity increases in Heart Failure. Increased sympathetic activity leads to the progressive pathogenesis of the disease but appears to be partially resolved by treatment with continuous positive airway pressure. Dr. Dick's proposal is that this improvement in cardiovascular function is related to the regularity of breathing and increased pulmonary sensory activity. His research examines the reciprocal interaction between ventilatory dysfunction and cardiovascular disease.