

**Erik van Lunteren, M.D.**

Professor of Medicine and Associate Professor of Neurosciences,  
Case Western Reserve University

Staff Physician, Cleveland Department of Veterans Affairs Medical  
Center and University Hospitals of Cleveland

Medical Director of Pulmonary Function Lab, Cleveland Department  
of Veterans Affairs Medical Center



**Education:**

Undergraduate: Stanford University, Palo Alto, CA  
B.S. Biology, 1975

Graduate School: Stanford University, Palo Alto, CA  
M.S. Biology, 1975

Medical School: Case Western Reserve University, Cleveland, OH  
M.D., 1979

**Training:**

Internship and Residency in Internal Medicine:  
Case Western Reserve University, University Hospitals of Cleveland, and Cleveland VA Medical Center,  
Cleveland, OH  
1979-1982

Fellowship in Pulmonary Medicine:  
Case Western Reserve University, University Hospitals of Cleveland, Cleveland VA Medical Center, Mt.  
Sinai Hospital and St. Lukes Medical Center, Cleveland, OH  
1982-1985

**Area of Concentration:**

Dr. van Lunteren currently serves as the Medical Director of the Pulmonary Function Laboratory at the Cleveland VA Medical Center. His clinical interests are in respiratory muscles, COPD/asthma, pulmonary function testing, sleep apnea, and pre-operative bariatric pulmonary evaluation. His research interests include respiratory muscle function in health and diseases such as muscular dystrophy and diabetes; the role of K<sup>+</sup> channels in respiratory muscle contraction and fatigue; and effects of disease on respiratory and cardiac muscle gene expression.

**Recent Publications:**

**van Lunteren, E.,** M. Moyer, and P. Leahy. Gene expression profiling of diaphragm muscle in  $\alpha$ 2-laminin (merosin) deficient *dy/dy* dystrophic mice. *Physiol. Genomics* 25: 85-95, 2006.

**van Lunteren, E.,** and M. Moyer. Altered diaphragm action potentials in Zucker diabetic fatty (ZDF) rats. *Respir. Physiol. Neurobiol.* 153: 157-165, 2006.

**van Lunteren, E.**, J. Pollarine, and M. Moyer. Inotropic effects of the K<sup>+</sup> channel blocker 3,4-aminopyridine: differential responses of rat soleus and extensor digitorum longus. *IEEE Trans. Neural Syst. Rehabil. Eng.* 14: 419-426, 2006.

**van Lunteren, E.**, M. Moyer, and J. Pollarine. Genetic CLC-1 chloride channel deficiency modifies diaphragm muscle isometric contractile properties. *Respir. Physiol. Neurobiol.* 155: 220-226, 2007.

**van Lunteren, E.**, J. Pollarine, and M. Moyer. Isotonic contractile impairment due to genetic CLC-1 chloride channel deficiency in myotonic mouse diaphragm muscle. *Exp. Physiol.* 92: 717-729, 2007.

**van Lunteren, E.**, and M. Moyer. Oxidoreductase, morphogenesis, extracellular matrix and calcium ion binding gene expression in streptozotocin-induced diabetic rat heart. *Am. J. Physiol. Endocrinol. Metab.* 293: E759-768, 2007.

Pollarine, J., M. Moyer, and **E. van Lunteren**. Isotonic fatigue in laminin  $\alpha$ 2 deficient dy/dy dystrophic mouse diaphragm. *Muscle Nerve* 36: 672-678, 2007).

Ionno, M., M. Moyer, J. Pollarine, and **E. van Lunteren**. Inotropic effects of the K<sup>+</sup> channel blocker 3,4-diaminopyridine on fatigued diaphragm muscle. *Respir. Physiol. Neurobiol.* 160: 45-53, 2008.

**van Lunteren, E.**, S. Spiegler, and M. Moyer. Contrast between cardiac left ventricle and diaphragm muscle in expression of genes involved in carbohydrate and lipid metabolism. *Respir. Physiol. Neurobiol.* 161: 41-53, 2008.

**van Lunteren, E.**, M. Moyer, and J. Pollarine. Long-lasting in vivo inotropic effects of the K<sup>+</sup> channel blocker 3,4-diaminopyridine (DAP) during fatigue-inducing stimulation. *Muscle Nerve* 38: 1616-1622, 2008.

#### **Contact Information:**

Cleveland Department of Veterans Affairs Medical Center  
Pulmonary Section, 111J (W)  
10701 East Boulevard  
Cleveland, OH 44106  
VA: (216) 791-3800 x4754; UHC: (216) 844-8489  
exv4@cwru.edu