

Michael Smith, PhD  
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Physiology & Anatomy  
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## Area of Expertise

Research efforts in the Smith lab focus on the neural control of cardiovascular function relating to mechanisms of sudden cardiac death, syncope, exercise training effects, and mechanisms of the association between obstructive sleep apnea and hypertension.

## Qualifications

PhD in Biology, University of North Texas  
MS in Physiology, Southern Illinois University  
BS in Biology, Texas Lutheran College

## Recent Publications

### **Osteopathic Manipulative Treatment Alters Gastric Myoelectric Activity in Healthy Subjects**

Shadiack, E., Jouett, N., Van Den Raadt, A., Liganor, R., Watters, J., Hensel, K. & Smith, M., Dec 2018, In : Journal of Alternative and Complementary Medicine. 24, 12, p. 1176-1180 5 p.

### **Rapid-eye-movement sleep-predominant central sleep apnea relieved by positive airway pressure: a case report**

Jouett, N. P., Smith, M. L., Watenpaugh, D. E., Siddiqui, M., Ahmad, M. & Siddiqui, F., May 2017, In : Physiological Reports. 5, 9, e13254.

### **Losartan reduces the immediate and sustained increases in muscle sympathetic nerve activity after hyperacute intermittent hypoxia**

Jouett, N. P., Moralez, G., Raven, P. B. & Smith, M. L., 1 Jan 2017, In : Journal of Applied Physiology. 122, 4, p. 884-892 9 p.

### **N-Acetylcysteine reduces hyperacute intermittent hypoxia-induced sympathoexcitation in human subjects**

Jouett, N. P., Moralez, G., White, D. W., Eubank, W. L., Chen, S., Tian, J., Smith, M. L., Zimmerman, M. C. & Raven, P. B., 1 Mar 2016, In : Experimental physiology. 101, 3, p. 387-396 10 p.

### **Systolic pressure response to voluntary apnea predicts sympathetic tone in obstructive sleep apnea as a clinically useful index**

Jouett, N. P., Hardisty, J. M., Mason, J. R., Niv, D., Romano, J. J., Watenpaugh, D. E., Burk, J. R. & Smith, M. L., 1 Jan 2016, In : Autonomic Neuroscience: Basic and Clinical. 194, p. 38-45 8 p.

### **Interactive effects of hypoxia, hypercapnia and lung volume on sympathetic nerve activity in humans**

Jouett, N. P., Watenpaugh, D. E., Dunlap, M. E. & Smith, M. L., 1 Sep 2015, In : Experimental physiology. 100, 9, p. 1018-1029 12 p.

### **[2] Commentaries on Viewpoint: The ongoing need for good physiological investigation: Obstructive sleep apnea in HIV patients as a paradigm**

Jouett, N. P. & Smith, M. L., 15 Jan 2015, In : Journal of Applied Physiology. 118, 2, 1 p.

### **Acute improvement in hemodynamic control after osteopathic manipulative treatment in the third trimester of pregnancy**

Hensel, K. L., Pacchia, C. F. & Smith, M. L., 1 Dec 2013, In : Complementary Therapies in Medicine. 21, 6, p. 618-626 9 p.

**Suboccipital decompression enhances heart rate variability indices of cardiac control in healthy subjects**

Giles, P. D., Hensel, K. L., Pacchia, C. F. & Smith, M. L., 1 Feb 2013, In : Journal of Alternative and Complementary Medicine. 19, 2, p. 92-96 5 p.

**Pressor response to 30-s breathhold: A predictor of masked hypertension**

Lyamina, N. P., Smith, M. L., Lyamina, S. V., Manukhina, E. B., Senchikhin, V. N., Pacchia, C. F. & Downey, H. F., 1 Dec 2012, In : Blood Pressure. 21, 6, p. 372-376 5 p.

**Sponsored Projects****A Wrist-Worn Biosensor System for Epileptic Seizure Alert**

Smith, M.

Intramural Research(TxMRC)

1/06/13 → 30/05/14

**Characterizing iPSC Pluripotency and Differentiation by Inorganic Elemental Concentration Profiles (For: Victor Lin)**

Smith, M.

Sigma Xi

30/12/13 → 30/12/14

**Mechanisms of Manual Medicine - U19 Bridge Funding**

Smith, M.

NCCAM: National Center for Complementary and Alternative Medicine

24/09/09 → 31/08/10

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**Osteopathic Scholars in Cancer Research (OSCR)**

Vishwanatha, J., Smith, M. & Basha, R.

Cancer Prevention & Res Inst of TX

1/03/17 → 28/02/22

**Pain-Mediated Sympathoexcitation in Heart Failure**

Smith, M. & Tierney, N.

Intramural Research(UNTHSC)

15/01/12 → 14/01/13

**Sympathetic Threshold in Obstructive Sleep Apnea: The Role of Oxidative Stress (For Noah Jouett)**

Smith, M.

Sigma Xi

1/01/15 → 31/01/16

**Sympathetic Threshold in Obstructive Sleep Apnea: The Role of Oxidative Stress (For: Noah Jouett)**

Smith, M.

American Medical Association

1/04/15 → 1/04/16

Trinity Trail Community Health Fair and Evaluation Fellowship for Kwong-Yao (Josh) Chow  
Smith, M.  
Arnold P. Gold Foundation  
15/05/10 → 15/09/10