

February 1, 2006

DEMOGRAPHIC INFORMATION

Current Appointment:

Associate Professor of Medicine
The Johns Hopkins University School of Medicine
Department of Medicine
Division of Allergy and Clinical Immunology

Joint Appointment, Associate Professor
The Johns Hopkins University Bloomberg School of Public Health
Department of Environmental Health Sciences, Physiology Division
Baltimore, Maryland

Personal Data:

Business Address:
The Johns Hopkins Asthma and Allergy Center
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Education and Training:

1973-1977	B.S., Biology Towson University Towson, Maryland
1984-1989	Ph.D., Pharmacology University of Maryland School of Medicine Department of Pharmacology and Experimental Therapeutics Baltimore, Maryland
1989-1990	Research Postdoctoral Fellow The Johns Hopkins University School of Medicine Department of Medicine Division of Pulmonary and Critical Care Medicine Baltimore, Maryland
1990-1991	Research Postdoctoral Fellow The Johns Hopkins University School of Medicine Department of Medicine Division of Clinical Immunology Baltimore, Maryland

Professional Experience:

1978-1983	Research Technician The Johns Hopkins University School of Medicine Department of Neuroscience Baltimore, Maryland
1990-1992	Adjunct Lecturer Department of Biology University of Maryland Baltimore County Catonsville, Maryland
1991-1992	Instructor of Medicine The Johns Hopkins University School of Medicine Department of Medicine Division of Clinical Immunology Baltimore, Maryland
1992-1998	Assistant Professor of Medicine The Johns Hopkins University School of Medicine Department of Medicine Division of Clinical Immunology Baltimore, Maryland
1998-present	Associate Professor of Medicine The Johns Hopkins University School of Medicine Department of Medicine Division of Clinical Immunology Baltimore, Maryland
2003-present	Joint Appointment, Associate Professor The Johns Hopkins University Bloomberg School of Public Health Department of Environmental Health Sciences Physiology Division Baltimore, Maryland

RESEARCH ACTIVITIES**PUBLICATIONS***Peer-Reviewed Articles:*

Lane A.P., Truong-Tran Q.A., **Myers A.C.**, Bickel, C.A., Schleimer R.P. (2005) Serum amyloid A, properdin, complement 3, and toll-like receptors are expressed locally in human sinonasal tissue. *American J Rhinology (In Press)*

Chuaychoo B., Hunter D.D., **Myers A.C.**, Kollarik M., Udem B.J. (2005) Allergen-induced substance P synthesis in large-diameter sensory neurons innervating the lungs. *J. Allergy and Clinical Immunol.* 116(2):325-31.

Peer-Reviewed Articles (cont.)

Kim J., **Myers A.C.**, Chen L., Pardoll D., Truong-Tran Q.A., Lane A., McDyer J., Fortuno L., Schleimer R.P. (2005) Constitutive and inducible expression of B7 family of ligands by human airway epithelial cells. *American J Respiratory and Critical Care Medicine*. 33(3):280-289.

Tolosa, J.N., **Myers, A.C.**, Northington, F., Cooper, R., Gauda, E.B. (2005) Ontogeny of retrograde labeled chemoafferent neurons in the newborn rat nodose-petrosal ganglion complex: ex vivo. *Neuroscience Letters* 284(1-2): 48-53.

Myers A.C., Goldie R. and Hay D.W. P. (2005) A novel role for tachykinin neurokinin-3 receptors in regulation of human bronchial ganglia neurons. *American Journal of Respiratory and Critical Care Medicine* 171(3):212-216.

Oda, N., Canelos P.B., Essayan D.M., Plunkett B.A., **Myers A.C.**, Huang S.K. (2005) Interleukin-17F induces pulmonary neutrophilia and amplifies antigen-induced allergic response. *American Journal of Respiratory and Critical Care Medicine* 171(1):12-8.

Xu, K.Y., Takimoto, E., Zhang, Q., Rohde, H.K., **Myers, A.C.** (2005) Evidence that the H1-H2 domain of $\alpha 1$ subunit of (Na⁺- K⁺)-ATPase participates in the regulation of cardiac contraction. *FASEB Journal* 19(1):53-61.

Udem B.J., Chuaychoo B., Lee M.G., Weinreich D., **Myers A.C.**, Kollarik M. (2004) Subtypes of vagal afferent C-fibres in guinea-pig lungs *Journal of Physiology (London)* 556:905-17.

Hung C.H., Chen L.C., Zhang Z., Chowdhury B., Lee W.L., Plunkett B., Chen C.H., **Myers A.C.**, Huang S.K. (2004) Regulation of TH2 responses by the pulmonary Clara cell secretory 10-kd protein. *J. Allergy and Clinical Immunology* 114(3):664-70.

Wang S.Q., Cheng H., **Myers A.C.**, Canning B.J., Xu K.Y. (2004) Positive inotropic effect induced by sequence-specific Na⁺- K⁺-ATPase antibody in intact cardiac myocytes. *Annals of the New York Academy of Science*. 986:630-632.

Kurosawa S., **Myers A.C.**, Chen L., Wang S., Ni J., Plitt J.R., Heller N.M., Bochner BS, Schleimer RP. (2003) Expression of the costimulatory molecule B7-H2 (ICOS-ligand) by human airway epithelial cells. *American Journal of Respiratory and Critical Care Medicine*. 28(5):563-73.

Kajekar, R., Udem, B.J. and **Myers, A.C.** (2003) Role of cyclooxygenase activation and prostaglandins in antigen-induced excitability changes of bronchial parasympathetic ganglia neurons. *American Journal of Physiology (Lung Cellular and Molecular Physiology)*. 284(4):L581-587.

Canning B.J., Anukwu L., Kajekar R., **Myers A.C.** (2002) Endogenous neurokinins facilitate synaptic transmission in guinea pig airway parasympathetic ganglia. *American Journal of Physiology (Regulatory, Integrative and Comparative Physiology)*. 283(2):R320-330.

Myers, A.C., Kajekar, R., Udem, B.J. (2002) Allergic inflammation-induced neuropeptide production in rapidly adapting afferent nerves in guinea pig airways. *American Journal of Physiology (Lung Cellular and Molecular Physiology)*. 282(4):L775-781.

Peer-Reviewed Articles (cont.)

Myers A.C., Bochner B.S., Tomaselli G.F, Fedarko N., Hudson S.A., Rohde H., Huang S-K., Xu K.Y. (2002) Cell surface expression of a specific antigenic site on the catalytic subunit of (Na⁺-K⁺)-ATPase. *Biochemical and Biophysical Research Communications*. 291(1): 111-115.

Kajekar, R., Rohde, H.K., **Myers A.C.**(2001) The integrative membrane properties of human bronchial parasympathetic ganglia neurons. *American Journal of Respiratory and Critical Care Medicine*. 164:1927-1032.

Chen, L-C., Zhang,Z., **Myers, A.C.** Huang S-K. (2001) Altered pulmonary eosinophilic inflammation in mice deficient for Clara cell secretory protein, CC10. *Journal of Immunology* 167(6):3025-3028.

Myers, A.C. (2001) Transmission in autonomic ganglia. *Respiration Physiology* 125: 99-111.

Udem, B.J., Kajekar, R., Hunter, D.D., **Myers, A.C.** (2000) Neural integration and allergic disease. *Journal of Allergy and Clinical Immunology*. 106: 213-20.

Myers, A.C. (2000) Anatomical characteristics of tonic and phasic postganglionic neurons in guinea pig bronchial parasympathetic ganglia. *Journal of Comparative Neurology*. 419:439-450.

Hunter, D.D., **Myers, A.C.**, and B.J. Udem (2000) Nerve growth factor-induced phenotypic switch in guinea pig airway sensory neurons. *American Journal of Respiratory and Critical Care Medicine* 161(6):1985-90.

Kajekar, R. and **Myers, A.C.** (2000) Effect of bradykinin on membrane properties of guinea pig bronchial parasympathetic ganglion neurons. *American Journal of Physiology (Lung Cellular and Molecular Physiology)* 278(3): L485-L491.

McAlexander, M.A., **Myers, A.C.** and Udem, B.J.. (1999) Adaptation of guinea-pig airway neurones to mechanical stimulation. *Journal of Physiology (London)* 521.1: 230-247.

Kajekar, R., Proud, D., Meeker, S.N., **Myers, A.C.**, and B.J. Udem. (1999) Characterization of vagal afferent subtypes stimulated by bradykinin in guinea pig trachea. *Journal of Pharmacology and Experimental Therapeutics*. 289: 682-687.

McAlexander, A.M., **Myers, A.C.**, and B.J. Udem (1998) Inhibition of 5-lipoxygenase diminishes neurally evoked tachykinergic contraction of the guinea pig isolated airway. *Journal of Pharmacology and Experimental Therapeutics* 285 (2) 602-607.

Myers, A.C. (1998) Calcium and potassium currents regulate action potential accommodation and firing frequency in guinea pig bronchial ganglia neurons. *American Journal of Physiology* 275 (2) L357-364.

Myers, A.C., Riccio, M.M., and B.J. Udem. (1997) Effects of nedocromil sodium on neurogenic mechanisms in vitro. *Journal of Allergy and Clinical Immunology* 98: 107-111.

Myers, A.C., B.J. Udem, and W. Kummer (1996) Anatomical and electrophysiological comparison of the sensory innervation of bronchial and tracheal parasympathetic ganglion neurons. *Journal of the Autonomic Nervous System* 61: 162-168.

Peer-Reviewed Articles (cont.)

Riccio, M.M., Kummer, W., Biglari, B., **Myers, A.C.** and B.J. Udem (1996) Interganglionic segregation of distinct vagal afferent fibre phenotypes in guinea-pig airways. *Journal of Physiology (London)* 496: 521-530.

Myers, A.C. and B.J. Udem. (1996) Muscarinic receptor regulation of synaptic transmission in airway parasympathetic ganglia. *American Journal of Physiology* 270 (Lung Cellular and Molecular Physiology 14) L630-L636.

Riccio, M. M., **A.C. Myers** and B.J. Udem (1995) Immunomodulation of afferent neurones in guinea-pig isolated airway. *Journal of Physiology (London)* 491: 499-509.

Myers, A.C. and B.J. Udem. (1995) Antigen depolarizes guinea pig bronchial parasympathetic ganglion neurons by activation of histamine H1 receptors. *American Journal of Physiology* 268 (Lung Cellular and Molecular Physiology 12): L879-884.

Udem, B.J., M.M. Riccio, D. Weinreich, J.L. Ellis, and **A.C. Myers** (1995) Neurophysiology of mast cell-nerve interactions in the airways *International Archives of Allergy Immunology*. 107(1-3):199-201.

Myers, A.C. and B.J. Udem. (1993) Electrophysiological effects of tachykinins and capsaicin on guinea-pig bronchial parasympathetic ganglion neurones. *Journal of Physiology (London)* 470: 665-679.

Udem, B.J., **Myers, A.C.** and Weinreich, D. (1991) Antigen-induced modulation of autonomic and sensory neurons in vitro. *International Archives of Allergy and Applied Immunology* 94: 319-324.

Myers, A.C. and B.J. Udem. (1991) Functional interactions between capsaicin-sensitive and cholinergic nerves in the guinea pig bronchus. *Journal of Pharmacology and Experimental Therapeutics* 259: 104-109.

Myers, A.C. and B.J. Udem. (1991) Analysis of preganglionic nerve evoked cholinergic contractions of the guinea pig bronchus *Journal of the Autonomic Nervous System* 35: 175-184.

Myers, A.C., B.J. Udem, and D. Weinreich. (1991) Influence of antigen on membrane properties of guinea pig bronchial ganglion neurons. *Journal of Applied Physiology* 71(3): 970-976.

Myers, A. C., B.J. Udem, and D. Weinreich. (1990) Electrophysiological properties of neurons in guinea pig bronchial parasympathetic ganglia. *American Journal of Physiology* 259 (Lung Cellular and Molecular Physiology 3): L403-L409.

Udem, B.J., **Myers, A.C.**, Barthlow, H. and D. Weinreich. (1990) Vagal innervation of guinea pig bronchial smooth muscle. *Journal of Applied Physiology* 69: 1336-1346.

Millington, W.R., **A.C. Myers**, and G.G. Bierkamper. (1985) Diisopropylfluorophosphate inhibits choline efflux from the perfused rat hemidiaphragm. *European Journal of Pharmacology* 115: 37-44.

Eipper, B.A., **A.C. Myers**, and R.A. Mains. (1985) Peptidyl-glycine a-amidation activity in tissues and serum of the adult rat. *Endocrinology* 116:2497-2504.

Peer-Reviewed Articles (cont.)

Mains, R.A., **A.C. Myers**, and B.A. Eipper. (1985) Hormonal, drug, and dietary factors affecting peptidyl-glycine a-amidating monooxygenase activity in various tissues of the adult male rat. *Endocrinology* 116: 2502-2515.

Extramural Sponsorship:**Grants**

Title: Neural Integration at Bronchial Parasympathetic Ganglia
2001-2005 NIH Research Scientist Award, R01HL48198-12
total direct costs: \$800,000; yearly direct costs: \$200,000
65% Effort as Principal Investigator, Dr. Allen C. Myers PI

Title: Tissue-Specific Mechanisms of Allergic Inflammation
2001-2005, NIH, Asthma and Allergy Disease Research Center, P01 AI50530-01
total direct costs: \$2,929,952; yearly direct costs: \$550,000;
15% Effort as Core Director, Dr. Bruce Bochner, PI

Title: Mast Cell-Nerve Interactions in Airways
2002-2006, NIH Research Scientist Award, R01HL38095-14
10% effort as co-investigator with Dr. Bradley J. Undem, PI
total direct costs: \$599,038, yearly direct costs: \$143,199

Title: Airway Epithelium and Sensory Neuroexcitability
1999-2004 NIH Research Scientist Award, R01 HL62296-01
total direct costs: \$928,412, yearly direct costs: 179,699
10% effort as co-investigator with Dr. Bradley J. Undem, PI

EDUCATIONAL ACTIVITIES**Teaching:**

Clinical Immunology Training	July-August 1993-2005
Physiology	Sept-Dec. 2003

Editorial Activities:

1997-present	Journal of Allergy and Clinical Immunology
1998-present	American Journal of Respiratory and Critical Care Medicine
1999-present	American Journal of Physiology
2002-present	Autonomic Neuroscience: Basic and Clinical
2003-present	Clinical and Experimental Allergy
2003-present	Respiration Physiology

PEER REVIEW

2004-present	National Science Foundation Research Proposals
2004-present	National Disease Research Interchange Human Organ Research Applications

CLINICAL ACTIVITIES: none

ORGANIZATIONAL ACTIVITIES**Institutional Administrative Appointments:**

Chair, Johns Hopkins Asthma Center Administration Committee, 1999-present

Department Representative, Johns Hopkins Office of Safety and Environmental Health, 1996-present

Johns Hopkins University Institutional Animal Care and Use Committee Member, 2004

Professional Societies:

Society for Neuroscience: 1982-present

American Physiological Society: 2002-present

RECOGNITION**Invited Talks:**

1991 Johns Hopkins School of Medicine, Baltimore, MD., Division of Pulmonary and Critical Care Medicine

1992 ICI Americas, Wilmington, DE, Department of Pulmonary Pharmacology

1995 Asthma : Mechanisms, Determinants of Severity, and Treatment, Vancouver, Canada, Fisons Pharmaceutical

1997 Johns Hopkins School of Medicine, Baltimore, MD., Division of Pulmonary and Critical Care Medicine

1999 The American Thoracic Society-American Lung Association International Meeting Symposium, San Diego, CA

2000 Airway modulation by allergic inflammation. International Society of the Autonomic Nervous Neurosciences Millenium Congress, London, UK

2001 University of West Virginia, Wheeling, West Virginia, Department of Anatomy

2005 Johns Hopkins Medicine International Global Access Lecture

Invited Reviews:

Udem, B.J. and Myers, A.C. (2001) Cholinergic and noncholinergic parasympathetic control of airway smooth muscle. In: Muscarinic Receptors in Airways Diseases. Zaagsma, J. Meurs, D., and Roffel, A., eds., Birkhauser Verlag, Switzerland.

Udem, B.J., Kajekar, R., Hunter, D.D., Myers, A.C. (2000) Neural Integration and Allergic Disease. *Journal of Allergy and Clinical Immunology*. 106(5 Suppl):S213-20.

Myers, A.C. (2000) Transmission in Autonomic Ganglia. In: Respiration Physiology Special Edition: Innervation of the Airways. Widdicombe, J.J. and Canning, B.J., eds., Elsevier Sciences, Amersterdam, Netherlands.

Invited Reviews (cont.):

Undem, B.J. and Myers, A.C. (2000) Neural Regulation of the Immune Response. In: Asthma and Rhinitis Vol 3., Holgate, S.T., and Bussey, W.W., eds., Blackwell Sci. Pub, Cambridge, MA..

Undem, B.J., Kajekar, R., Myers, A.C. (2000) Modulation of Peripheral Neurotransmission Associated with Mast Cell Activation. In: Mast Cells and Basophils in Physiology, Pathophysiology and Host Defense. G. Marone, Ed. Academic Press.

Undem, B.J. and Myers, A.C. (1999) Cholinergic and Noncholinergic Parasympathetic Control of Airway Smooth Muscle. In: The Autonomic Nervous System, Zaagsma, J. ed., Gordon and Breach Science Publishers, London.

Pederson, K.E., Myers, A.C., and Undem, B.J. (1998) Neuroimmune Interactions in Airway Inflammation. Eds. Holgate, S.T. and Busse, W.W. In: Lung Biology in Health and Disease: Vol. 117: Inflammatory Mechanisms of Asthma, Marcel Dekker.

Undem, B.J. and Myers, A.C. (1997) Neural Regulation of the Immune Response. In: Asthma and Rhinitis Vol 2., Holgate, S.T., and Bussey, W.W., eds., Blackwell Sci. Pub, Cambridge, MA.

Undem, B.J. and Myers, A.C. (1996) Autonomic Ganglia. In: Autonomic Control of the Respiratory System, Burnstock, G. ed., Gordon and Breach Science Publishers, London.

Undem, B.J. and Myers, A.C. (1994) Neural Regulation of the Immune Response. In: Asthma and Rhinitis Vol 1., Holgate, S.T., and Bussey, W.W., eds., Blackwell Sci. Pub, Cambridge, MA.

Undem, B.J., D. Weinreich, J.L. Ellis, and Myers, A.C. (1993) Neuronal Consequences of the Allergic Response in the Airways. In: ASTHMA: Physiology, Immunopharmacology, and Treatment. Holgate, S.T., ed., London, 275-286.

Undem, B.J. and Myers, A.C. (1992) Neural Regulation of the Immune Response. In: Asthma and Rhinitis Vol 1., Holgate, S.T., and Bussey, W.W., eds., Blackwell Sci. Pub, Cambridge, MA.