

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE	
Walter C. Hubbard		Associate Professor of Medicine	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Univ. of Arkansas Med. Sci., Little Rock, AR	B. S.	1966	Pharmacy
Vanderbilt University, Nashville, TN	Ph. D.	1974	Pharmacology
Vanderbilt University, Nashville, TN	Post-Doc.	1974-1976	Pharmacology

NOTE: The Biographical Sketch may not exceed two pages.

A. Positions and Honors. List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

- 1976-1977 Instructor, Vanderbilt Univ. School of Medicine, Dept. of Pharmacology, Nashville, TN
 1977-1983 Assistant Professor, Vanderbilt Univ. School of Medicine, Dept. of Pharmacology, Nashville, TN
 1983-1989 Cancer Expert/Senior Investigator, NIH/NCI/DTP, Bethesda, MD and NCI-FCRF, Frederick, MD
 1989- Associate Professor of Medicine, Division of Allergy and Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD

B. Selected peer-reviewed publications (in chronological order). Do not include publications submitted or in preparation. (Selected from more than 90 publications)

Udem, B. J., Hubbard, W. C., and Weinreich, D. Immunologically induced neuromodulation of guinea pig nodose ganglion neurone. *J. Auton. Nerv. Syst.* 44: 34-44, 1993.

Hubbard, W. C., Bickel, C. and Schleimer, R. P. Simultaneous quantitation of endogenous levels of cortisone and cortisol in human nasal and bronchoalveolar lavage fluids and in plasma via gas chromatography-negative ion chemical ionization mass spectrometry. *Anal. Biochem.* 221: 109-117, 1994.

Fernandes, L. B., Hubbard, W. C., and Udem, B. J. Release of inflammatory mediators from guinea pig trachea by electrical field stimulation: Lack of neuronal involvement. *J. Pharmacol. Exp. Ther.* 270: 1166-1170, 1994.

Ellis, J. L., Hubbard, W. C., Meeker, S. and Udem, B. J. Ragweed antigen challenge and anti-IgE in human central versus isolated bronchi. *Am. J. Respir. Crit. Care Med.* 150: 717-723, 1994

Udem, B. J., Lichtenstein, L. M., Hubbard, W. C., Meeker, S. and Ellis, J. L. Recombinant stem cell factor-induced mast cell activation and smooth muscle contraction in human bronchi. *Am. J. Respir. Cell Mol. Biol.* 11: 646-650, 1994.

Weinman, G. G., Liu, M. C., Proud, D., Weidenbach-Gerbase, M., Hubbard, W. and Frank, R. Ozone exposure in humans: Inflammatory, small and peripheral airway responses. *Am. J. Respir. Crit. Care Med.* 152: 1175-1182, 1995.

Hubbard, W. C., Hundley, T. R., Oriente, A., and MacGlashan, D. W., Jr. Quantitation of 1-stearoyl-2-arachidonoyl-sn-3-glycerol in human basophils via gas chromatography-negative ion chemical ionization mass spectrometry. *Anal. Biochem.* 236: 309-321, 1996.

Chilton, F. H., Averill, F. J., Hubbard, W. C., Fonteh, A. N., Triggiani, M., and Liu, M. C. Antigen-induced generation of lysophospholipids in human airways. *J. Exper. Med.* 183: 2235-2245, 1996.

Wagenmann, M., Baroody, F. M., Desrosiers, M., Hubbard, W. C., Ford, S., Lichtenstein, L. M., and Naclerio, R. M. Unilateral nasal challenge leads to bilateral release of prostaglandin D₂. *Clin. Exper. Allergy* 26: 371-378, 1996.

Bathon, J. M., Chilton, F. H., Hubbard, W. C., Towns, M. C., Solan, N. J., and Proud, D. Mechanisms of prostanoid synthesis in synovial cells: Cytokine-peptide synergism. *Inflammation* 20: 537-554, 1996.

Naclerio, R. M., Hubbard, W. C., Lichtenstein, L. M., Kagey-Sobotka, A. and Proud, D. Origin of the late-phase histamine release. *J. Allergy. Clin. Immunol.* 98: 721-723, 1996.

Oriente, A., Hundley, T., Hubbard, W. C., and MacGlashan, D. W., Jr. Preliminary characterization of diacylglycerol generation in human basophils: Temporal relationship to histamine release and resolution of degranulation. *J. Leukoc. Biol.* 61: 637-642, 1997.

Giardiello, F. M., Spannhake, E. W., Du Bois, R. N., Hyland, L. M., Robinson, C. R., Hubbard, W. C., Hamilton, S. R., and Yang, V. W. Prostaglandin levels in human colorectal mucosa: Effect of sulindac in patients with familial adenomatous polyposis. *Digestive Dis. Sci.* 43: 311-316, 1998.

Yang, V. W., Shields, J. M., Hamilton, E. W., Spannhake, E. W., Hubbard, W. C., Hyland, L. M., Robinson, C. R., and Giardiello, F. M. Size-dependent increase in mucosal prostanoid levels in adenomas of patients with familial adenomatous polyposis. *Cancer Res.* 58: 1750-1753, 1998.

Hundley, T. R., Marshall, L. A., Hubbard, W. C., and MacGlashan, D. W., Jr. Characteristics of arachidonic acid generation in human basophils: Relationship between effects of inhibitors of phospholipase A₂ activity and leukotriene C₄ release. *J. Pharmacol. Exp. Ther.* 284: 847-857, 1998.

Jackson, J. R., Bolognese, B., Mangar, C. A., Hubbard, W. C., Marshall, L. A., and Winkler, J. D. The role of platelet activating factor and other lipid mediators in inflammatory angiogenesis. *Biochim. Biophys. Acta.* 1392: 145-152, 1998.

Miura, K., Hubbard, W. C., and MacGlashan, D. W., Jr. Phosphorylation of cytosolic phospholipase A₂ (cPLA₂) by IL-3 is associated with increased free arachidonic acid generation and leukotriene C₄ release in human basophils. *J. Allergy Clin. Immunol.* 102: 512-520, 1998.

Yang, V. W., Geiman, D. E., Hamilton, S. R., Hubbard, W. C., Spannhake, E. W., Hyland, L. M., and Giardiello, F. M. Tissue prostanoids as biomarkers for chemoprevention of colorectal neoplasia: Correlation between prostanoid biosynthesis and clinical response in familial adenomatous polyposis. *Prostaglandins & Other Mediators* 60: 83-96, 2000.

Hubbard, W. C., Liu, M. C., Bickel, C., Argenti, D., Heald, D. and Schleimer, R. P. Measurement of low picomolar levels of triamcinolone acetonide (TAA) in human bronchoalveolar lavage fluid by gas chromatography-electron capture negative ion mass spectrometry. *Anal. Biochem.* 290: 18-25, 2001.

Liu, M. C., Proud, D., Lichtenstein, L. M., Hubbard, W. C., Bochner, B. S., Bochner, B. S., Stealey, B. A., Breslin, L., Xiao, H. Q., Freidhoff, L. R., Schroeder, J. T., and Schleimer, R. P. Effects of prednisone on inflammation at sites of segmental allergen challenge in allergic asthmatic subjects. *J. Allergy Clin. Immunol.* 108: 29-38, 2001.

Giardiello, F. M., Yang, V. W., Hyland, L. M., Hamilton, S. R., Krush, A. J., Petersen, G. M., Trimbath, J. D., Trimbath, J., Piantadosi, S., Garrett, E., Geiman, D. E., Hubbard, W., Offerhaus, J. A. and Yang, V. W. Primary chemoprevention in familial adenomatous polyposis with sulindac. *N. Engl. J. Med.* 346: 1054-1059, 2002.

Hubbard, W. C., Blum, A. E., Bickel, C., Heller, N. M. and Schleimer, R. P. Detection and quantitation of fatty acyl conjugates of triamcinolone acetonide via gas chromatography-electron capture negative ion mass spectrometry *Anal. Biochem.* 322:243-250, 2003.

Giardiello, F. M., Casero, R. A., Hyland, L. M., Hamilton, S. R., Trimbath, J. D., Geiman, D. E., Romans, K., Hubbard, Walter C., Offerhaus, J. A., and Yang, V. W. Prostanoids, ornithine decarboxylase and polyamines as biomarkers in primary chemoprevention of familial adenomatous polyposis with sulindac. *Gastroenterology*, in press