

BIOGRAPHICAL SKETCH

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NAME Mark P. Yeager, M.D.	POSITION TITLE Professor of Anesthesiology and Medicine		
eRA COMMONS USER NAME MYEAGER			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing,</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Middlebury College, Middlebury, VT	B.A.	1970	Biology
McGill University, Montreal, P.Q. Canada	M.D., C.M.	1974	Medicine

A. Positions and Honors.

Positions and Employment

1977-79 Residency, Internal Medicine, Dartmouth-Hitchcock Medical Center, ABIM # 73619
1979-81 Residency, Anesthesiology, Dartmouth-Hitchcock Medical Center, ABA #10941
1981-82 Fellowship, Critical Care, Dartmouth-Hitchcock Medical Center, ABA #204
1998-present Professor of Anesthesiology & Medicine, Dartmouth Medical School

Other Experience and Professional Memberships

1994-present Dartmouth College Institutional Review Board
1996-present Director of Research, Department of Anesthesiology and Critical Care Medicine
1998-2002 Appointments, Promotions, and Titles Committee - Dartmouth Medical School
1998-present William L. Garth Professor of Anesthesiology and Medicine

B. Selected peer-reviewed publications (in chronological order).

Book Chapters:

Yeager MP: Perioperative Stress Reduction with Intraspinal Opiates. In: Spinal Opiates, Rawal N and Coombs DW, (ed.), Boston, Kluwer Academic Publishers, pp. 63-76, 1989.

Yeager MP: Outcome of Pain Management. In: Acute Pain Management, Oden RV (ed.), Anesthesiology Clinics of North America, Philadelphia, W.B. Saunders Co., 7(1), pp. 241-258, 1989.

Yeager MP, Glass DD: Anesthesia for Abdominal Aortic Reconstruction: One Approach. In: Anesthesia for Vascular Surgery, Roizen M, (ed.), New York, Churchill Livingstone, pp. 285-298, 1990.

Yeager MP: Regional Anesthesia for Major Vascular Surgery. In: Anesthesiology and Vascular Surgery, Yeager MP and Glass DD, (ed.), Norwalk, CT, Appleton and Lange, pp. 363-379, 1990.

Yeager MP, Burns AK: Regional Versus General Anesthesia for Major Vascular Surgery. In: Vascular Anesthesia, Kaplan JA (ed.), New York, NY, Churchill Livingstone Co., pp. 309-332, 1991.

Bernauer E, **Yeager MP:** Optimal Pain Control in the Intensive Care Unit. In International Anesthesiology Clinics, Boston, Little Brown Co., 31 (2), pp. 201-220, 1993.

Yeager MP, Fillinger MP, Lundberg JL: Regional Anesthesia and Analgesia for Cardiothoracic and Vascular Surgery. In: Regional Anesthesia and Analgesia, Brown DL (ed.), Orlando, FLA, W B Saunders Co., pp. 512-536, 1996.

Chaimberg KH, **Yeager MP:** Anesthetic Techniques for Major Vascular Surgery. In: Vascular Anesthesia, Kaplan JA (ed.), Second Edition New York, NY, Churchill Livingstone Co., pp. 165-186, 2004.

Guyre PM, **Yeager MP**, Munck AU: Glucocorticoid Effects on Immune Responses. In: The Hypothalamus-Pituitary-Adrenal Axis; Neuroimmune Biology, Volume 7; Rey AD, Chrousos G, Besedovsky H (ed.), Boston, Elsevier, pp. 147-168 2008.

Journal Articles

Yeager MP, Coombs DW, Dodge CP, Maloney LL: Effect of cimetidine on biotransformation of enflurane in man. *Can Anaesth Soc J* 33(4):466-470, 1986.

Yeager MP, Glass DD, Neff RK, Brinck-Johnson T: Epidural anesthesia and analgesia in high-risk surgical patients. *Anesthesiology* 66(6):729-736, 1987.

Yeager MP and Colacchio TA: Effect of morphine on growth of metastatic colon cancer in vivo. *Archives of Surgery*, 126(4): 454-456, 1991.

Yeager MP, Yu CT, Campbell AS, Moschella M, Guyre P: Effect of morphine and beta-endorphin on human Fc receptor-dependent and natural killer cell functions. *Clin Immunol Immunopathol*, 62(3):336-343, 1992.

Yeager MP, Colacchio TA, Guyre PM: Effect of morphine, ketorolac, and epidural analgesia on natural killer cell activity and tumor growth. *advances in the biosciences*, 86:371-376, 1993.

Colacchio TA, **Yeager MP**, Hildebrandt LW: Perioperative immunomodulation in cancer surgery. *Am J Surgery*, 167(1):174-179, 1994.

Yeager MP, Colacchio TA, Yu CT, Hildebrandt L, Howell AL, Weiss J, Guyre PM: Morphine inhibits spontaneous and cytokine-enhanced natural killer cell cytotoxicity in volunteers. *Anesthesiology*, 83(3):500-508, 1995.

Colburn RW, DeLeo JA, Rickman AJ, **Yeager MP**, Kwon P, Hickey WF: Dissociation of microglial activation and neuropathic pain behaviors following peripheral nerve injury in the rat. *J Neuroimmunology*, 79(2):163-75, 1997.

DeLeo JA, Colburn RW, Rickman AJ, **Yeager MP**: Intrathecal catheterization alone induces neuroimmune activation in the rat. *European Journal of Pain*, 1:115-122, 1997.

Rassais AJ, Marrin CA, Arruda JA, Whalen K, Beach M, **Yeager MP**: Insulin infusion improves neutrophil function in diabetic cardiac surgery patients. *Anesthesia and Analgesia*, 88(5):1011-1016, 1999.

Yeager MP, Lunt P, Arruda J, Whalen K, Rose R, DeLeo JA: Cerebrospinal fluid cytokine levels after surgery with spinal or general anesthesia. *Regional Anesthesia and Pain Medicine*, 24(6):557-562, 1999.

Yeager MP, DeLeo JA, Hoopes PJ, Hartov A, Hildebrandt L, Hickey WF: Trauma and inflammation modulate lymphocyte localization *in vivo*: quantitation of tissue entry and retention using indium-111-labeled lymphocytes. *Critical Care Medicine*, 28(5):1477-1482, 2000.

Procopio MA, Rassias AJ, DeLeo JA, Pahl J, **Yeager MP**: The *in vivo* effects of general and epidural anesthesia on human immune function. *Anesthesia and Analgesia*, 93(2):460-465, 2001.

Yeager MP, Procopio MA, DeLeo JA, Arruda JL, Hildebrandt L, Howell AL: Intravenous fentanyl increases natural killer cell cytotoxicity and circulating CD16⁺ lymphocytes in humans. *Anesthesia and Analgesia*, 94(1):94-99, 2002.

Fillinger MP, Rassias AJ, Guyre PM, Sanders JH, Beach M, Pahl J, Watson RB, Whalen PK, Yeo KTJ, **Yeager MP**: Glucocorticoid effects on the inflammatory and clinical response to cardiac surgery. *Journal of Thoracic and Cardiovascular Anesthesia*, 16(2):163-9, 2002.

Rassias AJ, Givan AL, Marrin CAS, Whalen PK, Pahl J, **Yeager MP**: Insulin increases neutrophil Phagocytic capacity in non-diabetic cardiac surgical patients. *Anesthesia and Analgesia*, 94:1113-9, 2002.

Hintz KA, Rassias AJ, Wardwell K, Moss MM, Morganelli PM, Pioli PA, Givan AL, Wallace PK, **Yeager MP**, Guyre PM: Endotoxin induces rapid metalloproteinase-mediated shedding followed by upregulation of the monocyte hemoglobin scavenger receptor cd163. *Journal of Leukocyte Biology*, 72:711-717, 2002.

Fairhurst AM, Connolly JE, Hintz KA, Goulding NJ, Rassias AJ, **Yeager MP**, Rigby W, Wallace PK: Regulation and localization of endogenous human tristetraprolin. *Arthritis Res Ther*, 5:214-225, 2003.

Goldstein, JI, Hintz-Goldstein, KA, Wardwell, K, Fahrner, SL, Goonan, KE, Cheney, MD, **Yeager, MP**, and Guyre, PM. Increase in plasma and surface CD163 levels in patients undergoing coronary artery bypass graft surgery. *Atherosclerosis*, 170(2):325-32, 2003.

Yeager MP, Guyre PM, Munck AU. Glucocorticoid regulation of the inflammatory response to injury. *Acta Anaesthesiol Scand*. 48(7):799-813, 2004.

Rassias AJ, Guyre PM, Holzberger P, Givan AL, Fahrner SL, **Yeager MP**. Decreased physiologic variability as a generalized response to human endotoxemia. *Crit Care Med*, 33(3):512-19, 2005.

Yeager MP, Fillinger MP, Hartman GS. Beta-blockade and surgical survival--a complementary hypothesis. *J. Thor Cardiovasc Anesth*, 19(2):237-241, 2005.

Yeager MP, Rassias AJ, Fillinger MP: DiScipio AW, Gloor KE, Gregory JA, Guyre PM: Cortisol Anti-inflammatory effects are maximal at postoperative plasma concentrations. *Crit Care Med* 33(7):1507-1512, 2005.

Yeager MP, Clark JA, Yeager SB: A novel method for selective delivery of drugs to pulmonary arteries. *Drug Delivery* 12:1-5, 2005.

Dodds TM, Fillinger MP, Walsh DB, Surgenor SD, Mandel D, **Yeager MP**: Clinical outcomes after lower extremity revascularization: a comparison of epidural and general anesthesia. *J Applied Research* 7(3):238-249, 2007.

Yeager MP, Pioli PA, Wardwell K, Beach ML, Martel P, Lee HK, Rassias AJ, Guyre PM. In vivo exposure to high or low cortisol has biphasic effects on inflammatory response pathways of human monocytes. *Anesth Analg*. 2008 Nov;107(5):1726-34.

Guyre PM, **Yeager MP**, Munck AU: Glucocorticoid Effects on Immune Responses. In: *The Hypothalamus-Pituitary-Adrenal Axis; Neuroimmune Biology*, Volume 7; Rey AD, Chrousos G, Besedovsky H (ed.), Boston, Elsevier, pp. 147-168 2008.

Yeager MP, Rassias AJ, Pioli PA, Beach ML, Wardwell K, Collins J, Lee HK, Guyre PM: Stress Cortisol Pre-treatment Enhances the Human Systemic Inflammatory Response to Bacterial Endotoxin. *Crit Care Med* (In Press).

Recent Abstracts

Rassias AJ, Fahrner SL, Guyre PM, **Yeager MP**. "Endotoxemia decreases approximate entropy of human cortisol secretion". *Critical Care Medicine* 30:A106, 2003.

Goldstein, JI, Hintz-Goldstein, KA, Wardwell, K, Fahrner, SL, Goonan, KE, Cheney, MD, **Yeager, MP**, and Guyre, PM. Increase in plasma and surface CD163 levels in patients undergoing coronary artery bypass graft surgery. *Annual Meeting of the American Association of Immunologists*, Denver, CO, 2003

Yeager MP, Fillinger MP, Guyre PM, Gregory JA, DiScipio A. Pharmacologic or Physiologic Cortisol?: Evidence for Equivalent Suppression of Systemic Inflammation. American Society of Anesthesiologists Annual Meeting Abstracts, Las Vegas, NV 2004.

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Snaveley AD, Rassias AJ, **Yeager MP**. Pulsatile vs. Continuous Cortisol Infusions – Anti-Inflammatory Effects Compared. American Society of Anesthesiologists Annual Meeting Abstracts, San Francisco CA, 2007.

Rassias AJ, Guyre PM, **Yeager MP**. Pre-treatment with a stress-dose but not a high dose infusion of hydrocortisone maintains heart rate variability during human endotoxemia, International Shock Congress/International Conference on Complexity in Acute Illness, Annual Meeting Abstracts, Cologne, Germany, 2008

C. Research Support

Ongoing Research Support

None

Completed Research Support

1 RO1AI051547 Guyre (PI)

04/01/03-03/31/09

NIH/NIAID

(currently in no-cost extension)

Critical Glucocorticoid/Cytokine Mechanisms in Endotoxemia

Objective: 1) To test the hypothesis that GCs exert a biphasic influence on cytokine production and Mo/MØ phenotype during an acute inflammatory response. 2) To elucidate the molecular mechanisms of permissive and suppressive effects of GCs on the macrophage activation program.

Role: Co-Investigator.