

CURRICULUM VITAE

Jeffrey M. Dodd-o, MD, PhD

November 2013

DEMOGRAPHIC INFORMATION

Current Appointments

Associate Professor

Departments of Anesthesiology/Critical Care Medicine and Surgery

The Johns Hopkins University School of Medicine

Baltimore, Maryland

Personal Data

The Johns Hopkins University School of Medicine

Department of Anesthesiology/Critical Care Medicine

600 N. Wolfe Street, Meyer 291

Baltimore MD 21287-7294

phone: 410-955-9080; fax: 410-955-8978; email: jdoddo@jhmi.edu

Education and Training

BS 1976–1981 Pennsylvania State University General Arts & Sciences
University Park, Pennsylvania

BA 1976–1981 Pennsylvania State University Spanish
University Park, Pennsylvania

MD 1981–1985 Medical College of Pennsylvania Medicine
Philadelphia, Pennsylvania

Internship 1985–1986 Northeastern Ohio University General Surgery
College of Medicine
Youngstown Hospital, Youngstown, Ohio

PhD 1988–1990 University of North Texas Physiology
Denton, Texas

Residency 1990–1993 The Johns Hopkins Hospital Anesthesiology
Baltimore, Maryland

Fellowship 1993–1994 The Johns Hopkins Hospital Critical Care Medicine
Baltimore, Maryland

Professional Experience

- 1986–1990 Staff Physician, Emergency Medicine
Carswell Regional Hospital, Fort Worth, Texas
- 1994–2006 Assistant Professor, Department of Anesthesiology/Critical Care Medicine
Johns Hopkins University, Baltimore, Maryland
- 1994–2006 Assistant Professor, Department of Surgery
Johns Hopkins University, Baltimore, Maryland
- 1994–1996 Attending, Surgical Intensive Care Unit
The Johns Hopkins Hospital, Baltimore, Maryland
- 1994–1996 Attending, Intermediate Care Unit
The Johns Hopkins Hospital, Baltimore, Maryland
- 1996–present Attending, Cardiac Surgical Intensive Care Unit
The Johns Hopkins Hospital, Baltimore, Maryland
- 1996–present Attending, Cardiac Anesthesia
The Johns Hopkins Hospital, Baltimore, Maryland
- 2002–2005 Associate Director of Residency
Anesthesiology and Critical Care
The Johns Hopkins Hospital, Baltimore, Maryland

RESEARCH ACTIVITIES

Publications

Peer-reviewed articles

1. Dodd-o JM, Wieneke KF, Rosman PM. Laryngeal rhabdomyosarcoma. Case report and literature review. *Cancer* 1;59(5):1012–8, 1987.
2. Gwartz PA, Dodd-o JM, Brandt MA, Jones CE. Augmentation of coronary flow improves myocardial function in exercise. *J Cardiovasc Pharmacol* 15(5):752–8, 1990.
3. Gwartz PA, Dodd-o, JM, Downey, HF, Mass, HM, Barron, BA, Williams, AG, Jones, CE. Effects of coronary alpha1-constriction on transmural left ventricular flow and contractile function in dogs. *Am J Physiol* 262:H965–2,1992.

4. Dodd-o JM, Gwartz PA. Cardiac response to coronary artery occlusion in exercise-trained dogs. *Med Sci Sports Exerc* 24(11):1245–51, 1992.
5. Dodd-o JM, Gwartz PA. Coronary alpha 1-adrenergic constrictor tone varies with intensity of exercise. *Med Sci Sports Exerc* 28(1):62–71, 1996
6. Dodd-o JM, Zheng G, Silverman HS, Lakatta EG, Ziegelstein RC. Endothelium-independent relaxation of aortic rings by the nitric oxide synthase inhibitor diphenylethylamine. *Br J Pharmacol* 120:857–64, 1997.
7. Dodd-o JM, Breslow MJ, Dorman T, Rosenfeld BA. Preserved sympathetic nervous system response to hypotension despite perioperative alpha2 agonist administration. *Anes Anal* 84(6):1208–10, 1997.
8. Mebazaa A, Wetzel RC, Dodd-o JM, Redmond EM, Shah AM, Maeda K, Maistre G, Lakatta G, Robotham JL. Potential paracrine role of the pericardium in the regulation of cardiac function. *Cardiovasc Res* 40(2):332–42, 1998.
9. Brower R, Shanholtz C, Fessler H, Shade D, White Jr. P, Wiener C, Teeter J, Dodd-o J, Almog Y, Piantodosi S. Small tidal volume ventilation in ARDS: Results of a randomized controlled trial. *Crit Care Med* Aug;27(8):1492–8, 1999.
10. Dodd-o JM, Pearse DB. Effect of the NADPH oxidase inhibitor apocynin on ischemia-reperfusion lung injury. *Am J Respir Circ Physiol* 279(1):A303–12, 2000.
11. Faraday N, Scharpf RS, Dodd-o JM, Martinez EA, Rosenfeld BA, Dorman T. Leukocytes can enhance platelet-mediated aggregation and thromboxane release via interaction of P-selectin glycoprotein ligand 1 with P-selectin. *Anesthesiology* 94(1):145–51, 2001.
12. Dodd-o JM, Hristopoulos M, Faraday N, Pearse DB. Effect of ischemia and reperfusion on vascular barrier function in the in vivo mouse lung. *J Appl Physiol* 95(5):1971–8, 2003. Epub, Aug. 1, 2003.
13. Dodd-o JM, Welch LE, Salazar JD, Walinsky PL, Peck EA, Shake JG, Caparelli DJ, Bathea BT, Cattaneo SM, Baumgartner WA, Pearse DB. The effect of bronchial artery blood flow on cardiopulmonary bypass-induced lung injury. *Am J Physiol Heart Circ Physiol* 286(2):H693–700, 2004. Epub, Oct. 16, 2003.
14. Wagner KF, Hellberg A-K, Balenger S, Dodd-o JM, Johns RA, Li D. Hypoxia-induced mitogenic factor has anti-apoptotic action and is upregulated in the developing lung late in gestation: Co-expression with HIF-2. *Am J Resp Cell Mol Biol* 31(3):276–82, 2004.
15. Dodd-o JM, Welsh LE, Salazar JD, Walinsky PL, Peck EA, Shake JG, Caparelli DJ, Ziegelstein RC, Zweier JL, Baumgartner WA, Pearse DB. Effect of the NADPH

oxidase inhibitor apocynin on cardiopulmonary bypass
2, 2004.

15. Dodd-o JM, Welsh LE, Salazar JD, Walinsky PL, Peck EA, Shake JG, Caparrelli DJ, Ziegelstein RC, Zweier JL, Baumgartner WA, Pearse DB. Effect of the NADPH oxidase inhibitor apocynin on cardiopulmonary bypass-induced lung injury. *Am J Physiol Heart Circ Physiol* 287(2):H927–36, 2004.

16. Li D, Fernandez LG, Dodd-o J, Langer J, Wang D, Laubach VE. Upregulation of hypoxia-induced mitogenic factor in compensatory lung growth after pneumonectomy. *Am J Respir Cell Mol Biol* 32(3):185–91, 2005.

17. Tong Q, Zheng L, Dodd-o J, Langer J, Wang D, Li D. Hypoxia-induced mitogenic factor modulates surfactant protein B and C expression in mouse lung. *Am J Respir Cell Mol Biol* 34(1):28–38, 2006.

18. Tong Q, Zheng L, Kang Q, Dodd-o J, Langer J, Li B, Wang D, Li D. Upregulation of hypoxia-induced mitogenic factor in bacterial lipopolysaccharide-induced acute lung injury. *FEBS Lett* Mar 20, 2006 [Epub ahead of print].

19. Dodd-o JM, Hristopoulos ML, Tankersley CG, Pearse DB. Strain-specific differences in sensitivity to ischemia-reperfusion lung injury in mice. *J Appl Physiol* 2006;100(5):1590-5.

20. Dodd-o JM, Hristopoulos ML, Kibler K, Gutkowska J, Mukaddam-Daher S, Gonzalez A, Welsh-Servinsky LE, Pearse DB. The role of natriuretic peptide receptor-A signaling in unilateral lung ischemia-reperfusion injury in the intact mouse. *Am. J. Physiol. Lung Cell Mol. Physiol.* 2008;294(4):L714-23.

21. Dodd-O JM, Hristopoulos M, Scharfstein D, Brower R, Hassoun P, King LS, Becker P, Liu M, Wang W, Hassoun HT, Rabb H. Interactive effects of mechanical ventilation and kidney health on lung function in an in vivo mouse model. *Am. J. Physiol. Lung Cell Mol. Physiol.* 2009;296(1):L3-11.

22. Mitter N, Shah A, Yuh D, Dodd-O J, Thompson RE, Cameron D, Hogue CW. Renal injury is associated with operative mortality after cardiac surgery for women and men. *J Thorac Cardiovasc Surg.* 2010;140(6):1367-73.

23. Dodd-o JM, Lendermon EA, Miller HL, Zhong Q, John ER, Jungraithmayr WM, D'Alessio FR, McDyer JF. CD154 blockade abrogates allospecific responses and enhances CD4(+) regulatory T-cells in mouse orthotopic lung transplant. *Am J Transplant.* 2011;11(9):1815-24.

24. Gurkan OU, He C, Zielinski R, Rabb H, King LS, Dodd-o JM, D'Alessio FR, Aggarwal N, Pearse D, Becker PM. Interleukin-6 mediates pulmonary vascular

permeability in a two-hit model of ventilator-associated lung injury. *Exp Lung Res.* 2011;37(10):575-84.

25. Prakash A, Mesa KR, Wilhelmsen K, Xu F, Dodd-o JM, Hellman J. Alveolar macrophages and Toll-like receptor 4 mediate ventilated lung ischemia reperfusion injury in mice. *Anesthesiology.* 2012;117(4):822-35.

Book Chapters

1. Stauffer AZ, Dodd-o JM, Lathers CM. The relationship of the phenomenon with precipitous changes in mean arterial blood pressure. *EEG in Clinical Neurology*, 1989.
2. Stauffer AZ, Dodd-o JM, Lathers CM. The lock-step phenomenon and its relationship with precipitous blood pressure changes. In: Lathers CM, Schraeder (eds.), *Sudden Death in Epileptic Persons; Occurrence and Possible Causes*. New York: Marcel Dekker, Inc., 1989.
3. Dodd-o JM. Chronic ulcerative colitis. In: Roizen MF, Fleisher LA (eds.) *Essence of Anesthesia practice*. Philadelphia: WB Saunders Co., 1996.
4. Dodd-o J, Nyhan D. Cardiac Surgery Intensive Care. In: Helfaer MA (ed.) *ICU Care*. Baltimore: Williams & Wilkins, 1998.
5. Dodd-o JM. Cardiovascular Function and Physiology. In Yuh DD, Vricella LA, Baumgartner W (ed.) *The Johns Hopkins Manual of Cardiothoracic Surgery*. 1st edition. The McGraw-Hill Companies, 2007.

Patent

The Use of an NADPH-Oxidase Inhibitor in the treatment of Reperfusion Injury
Patent Number 6,090,851

Extramural Sponsorship

Past

07/01/2004–06/30/2005

The Influence of Elastase Upon Pulmonary Microvascular Barrier Function
American Heart Association, #0255140N

Jeffrey M. Dodd-o, MD, PhD

Principal Investigator

30% effort; Annual Direct Cost: \$6,500; Total Direct Cost: \$65,000

12/01/2003–11/30/08

Ventilator-Associated Lung Injury: Molecular Approaches

NIH NHLBI, P050 HL 73994-01, Sponsor: SCCOR

Garcia, JGN, Principal Investigator

Jeffrey M. Dodd-o, MD, PhD, Co-Investigator, Project 5: Lung/Kidney Interactions in VALI

10% effort; Total Direct Cost: \$2,578,827

EDUCATIONAL ACTIVITIES

Teaching

1986–1990 Instructor Advanced Cardiac Life Support
Carswell Regional Hospital, Fort Worth, Texas

1987–1990 Instructor Emergency Medicine Provider Course
Carswell Regional Hospital, Fort Worth, Texas

1987–1990 Assistant Physiology Laboratory
Instructor Texas College of Osteopathic Medicine, Fort Worth, Texas

1991–1992 Preceptor of Medical Students
Department of Anesthesiology/Critical Care Medicine
Johns Hopkins University School of Medicine, Baltimore, Maryland

1993–1994 Instructor Advanced Cardiac Life Support Course
Johns Hopkins Hospital, Baltimore, Maryland

Instructor The Fourth Annual Update on Obstetric Anesthesia
Department of Anesthesiology/Critical Care Medicine
Johns Hopkins University School of Medicine, Baltimore, Maryland

1995–1996 Instructor Resident Teaching Series
Department of Surgery
Johns Hopkins University School of Medicine, Baltimore, Maryland

1993–2006 Instructor Resident Teaching Series
Department of Anesthesiology/Critical Care Medicine
Johns Hopkins University School of Medicine, Baltimore, Maryland

Mentorship

Research

1997–1999 Jorge Salazar – Cardiac Surgery Resident Research Training. Published Projects (see “Peer-reviewed articles” above): 1) The effect of bronchial artery blood flow on cardiopulmonary bypass-induced lung injury, 2) Effect of the NADPH-Oxidase inhibitor apocynin on cardiopulmonary bypass-induced lung injury.

1998–2000 Peter Walinsky – Cardiac Surgery Resident Research Training. Published Projects (see “Peer-reviewed articles” above): 1) The effect of bronchial artery blood flow on cardiopulmonary bypass-induced lung injury, 2) Effect of the NADPH-Oxidase inhibitor apocynin on cardiopulmonary bypass-induced lung injury.

1999–2001 Jay Shake – Cardiac Surgery Resident Research Training. Published Projects (see “Peer-reviewed articles” above): 1) The effect of bronchial artery blood flow on cardiopulmonary bypass-induced lung injury, 2) Effect of the NADPH-Oxidase inhibitor apocynin on cardiopulmonary bypass-induced lung injury.

2000–2002 David Caparelli – Cardiac Surgery Resident Research Training. Published Projects (see “Peer-reviewed articles” above): 1) The effect of bronchial artery blood flow on cardiopulmonary bypass-induced lung injury, 2) Effect of the NADPH-Oxidase inhibitor apocynin on cardiopulmonary bypass-induced lung injury.

2000–2002 Stephen Cattaneo – Cardiac Surgery Resident Research Training. Published Projects (see “Peer-reviewed articles” above): 1) The effect of bronchial artery blood flow on cardiopulmonary bypass-induced lung injury, 2) Effect of the NADPH-Oxidase inhibitor apocynin on cardiopulmonary bypass-induced lung injury.

2002–2003 Brachen DeWitt – Anesthesiology Resident Research Training. ??????

2002–2003 Brian Bathea – Cardiac Surgery Resident Research Training. Published Projects (see “Peer-reviewed articles” above): 1) The effect of bronchial artery blood flow on cardiopulmonary bypass-induced lung injury, 2) Effect of the NADPH-Oxidase inhibitor apocynin on cardiopulmonary bypass-induced lung injury.

2004–2005 Kevin G. Soucy –Thesis Committee, Masters Degree in Science, Dept. of Biomedical Engineering, The Johns Hopkins University. Thesis entitled, “Novel Fluorescent-Based Method for the Evaluation of Nitric Oxide Signaling in the Endothelium of Intact Rat Aorta: Implications for the Study of Vascular Aging.” Aug 3, 2005.

2004–2005 Jochen Steppan – Research Externship for German Medical Student. Project: NADPH Oxidase-Independent Effects of Apocynin on Rodent Vasculature.

Clinical – Cardiac Anesthesia Fellows

1994–1996 Vivian Hou–Assistant Professor, Oregon Health Science University, Portland, OR

1996–1997 Nicholas Kambouris–Staff Anesthesiologist, Washington Hospital Center,

Washington, DC

- 1996–1998 Wendy Burnstein–Assistant Professor, University of Maryland Health System, Baltimore, MD
- 1996–1998 Mary Beth Brady–Assistant Professor, ACCM, The Johns Hopkins Hospital, Baltimore, MD
- 1997–1998 Mary Louise Roper–University of Texas Medical Branch, San Antonio, Texas
- 1997–1998 Ronald Bank–Attending Anesthesiologist, INOVA Fairfax Hospital, Fairfax, VA
- 1997–1998 Ahmad Chaudhry (nee Ashfaq) –Attending Anesthesiologist, The Valley Hospital, Ridgewood, NJ
- 1998–2000 Mary Wheeler–Assistant Professor, University of Texas Health Science Center, San Antonio, TX
- 1999–2000 Valerie Sera–Assistant Professor, Oregon Health Science University, Portland, OR
- 1999-2000 Peter Jiang- Attending Anesthesiologist, Orlando Regional Health Care
- 1999–2000 Charles Lancelotta–Attending Anesthesiologist, Lancaster General Hospital, Lancaster, PA
- 2000-2001 Stephen Aufderheide-Assistant Professor, Portland, Oregon
- 2000-2001 Gary Kaneshige-Attending Anesthesiologist, Loma Linda Medical Center, Loma Linda, CA
- 2001–2002 Rojack Tan–Attending Anesthesiologist, Suburban Hospital, MD
- 2001–2002 Wei Dong Gao–Assistant Professor, ACCM, Johns Hopkins Hospital, Baltimore, MD
- 2001–2002 Mike Faulkner (ICU & Cardiac) –Attending Anesthesiologist, University of Michigan
- 2001–2003 Alá Haddadin (ICU & Cardiac)–Assistant Professor, Yale School of Medicine, New Haven, CT
- 2002–2003 Edward Verde (ICU & Cardiac) –Attending Anesthesiologist, Loma Linda Veterans Hospital, Loma Linda, CA
- 2002–2003 James Weller–Attending Anesthesiologist, Bethesda North Hospital, Cincinnati, OH
- 2003–2004 Kelly Grogan–Attending Anesthesiologist, Assistant Professor, ACCM, The Johns Hopkins Hospital, Baltimore, MD
- 2003–2004 Matthew Caldwell–Assistant Professor, University of Michigan, Ann Arbor, MI
- 2003-2004 Izumi Harukuni – Assistant Professor, Portland Oregon
- 2004–2005 Prasert Sawasdiwpachai (ICU & Cardiac)–Pediatric Anesthesiology Fellowship, Columbia University, New York, NY
- 2005-2006 Mohammed Durani – Attending Anesthesiologist, Private Practice, New Jersey
- 2005-2006 Paul Simmonds – Attending Anesthesiologist, Private Practice, Phoenix, AZ
- Clinical – Critical Care
- 2002-03 Tain-Yen Hsia – Fellow, Pediatric Cardiac Surgery, Children’s Hospital of Pennsylvania, Philadelphia, PA

2002-03 Eric Peck Attending Surgeon, Cardiothoracic Surgery
2001-02 Jorge Salazar – Attending Surgeon, Cardiothoracic Surgery, University of Texas at San Antonio Medical Center, San Antonio, Texas
2001-02 John Doty – Attending Surgeon, Cardiothoracic Surgery, University of Utah Medical Center
2001-02 Ala S. Haddadin – Attending Anesthesiologist and Intensivist, Yale University Hospital
2000-01 Peter Walinsky – Attending Surgeon, Cardiothoracic Surgery, Presbyterian Heart Group, Albuquerque, NM
2000-01 Pierre Theodore – Attending Surgeon, Cardiovascular Surgery, UCSF, San Francisco, CA
1999-2000 Elaine Tseng – Attending Surgeon, Cardiothoracic Surgery, UCSF, San Francisco, CA
1999-2000 Daniel Meldrum – Attending Surgeon, Cardiothoracic Surgery, Indiana University Medical Center, Indianapolis, IN
1998-99 Peter Gruber – Attending Surgeon, Pediatric Cardiothoracic Surgery, Children’s Hospital of Pennsylvania, Philadelphia, PA
1998-99 Pirooz Eghtesady – Attending Surgeon, Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
1997-98 Kirk Fleischer – Attending Surgeon, Cardiothoracic Surgery, Mid-Atlantic Cardiothoracic Surgeons, Ltd, Norfolk, VA
1997-98 Malcolm Brock – Attending Surgeon, Thoracic Surgery, Johns Hopkins Medical Center
1997-98 Kenton Zehr – Attending Surgeon, Cardiothoracic Surgery, Mayo Clinic Medical Center, Rochester, MN
1997-98 Peter Cho – Attending Surgeon, Cardiothoracic Surgery, Sinai Medical Center, Baltimore, MD
1996-97 John Liddicoat – Attending Surgeon, Cardiothoracic Surgery, Beth Israel-Deaconess Hospital, Boston, MA
1996-97 Octavian Pajaro – Attending Surgeon, Cardiothoracic Surgery, Mayo Clinic Medical Center, Jacksonville, FL

Invited Talks/Presentations

2000 – Combined Grand Rounds, Division of Critical Care Medicine, Georgetown University and Washington Hospital Center, Washington, DC, “Vasopressin: Is it the best choice?”

2003-Modified donor ventilation strategy could increase cadaveric kidney availability and reduce risk of delayed graft function. American Transplant Congress (ATC). Joint Meeting of the American Society of Transplant Surgeons/American Society of Transplantation (ASTS/AST)

2004 – Grover Conference, Denver, CO, “Genetic regulation of pulmonary vascular permeability following ischemia-reperfusion lung injury in mice”

2005 – American Society of Critical Care Anesthesiologists, New Orleans, Louisiana/ Atlanta, Georgia “Mediators of Reperfusion Lung Injury”

2006 American Society of Critical Care Anesthesiologists, Chicago, ILL “Mediators of Reperfusion Lung Injury”

2006 – Anesthesiology Grand Rounds Universitaet Luebeck, Luebeck, Germany, “Mediators of Reperfusion Lung Injury”

2006 – American Society of Critical Care Anesthesiologists, “Mediators of Post-CPB Lung Injury”

2007 – Critical Care Conference Series, Centers for Lung Biology, University of South Alabama, “Mediators of Post-CPB Lung Injury”

2007 - 3rd International Conference on cGMP Generators, Effectors and Therapeutic Implications Dresden, Germany, June 15 - 17, 2007. Reperfusion lung injury is attenuated by natriuretic peptide receptor antagonist in in-vivo mouse model

Editorial Activities

2001–2005 Ad Hoc Reviewer – Anesthesiology

2001–2005 Ad Hoc Reviewer – European Journal of Pharmacology

2006 Ad Hoc Reviewer – Experimental and Molecular Pathology

CLINICAL ACTIVITIES

Certification

1986 Pennsylvania State License

1987 National Board of Medical Examiners

1988 Federal Licensure Exam

1988 Texas State Board of Medical Examiners

1993 Maryland Board of Physician Quality Assurance

1994 Diplomate of the American Society of Anesthesiologists
Special Certificate of Competency in Critical Care Medicine

Perioperative Transesophageal Echocardiography

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Assignments

1986–1990 Pharmaceuticals and Therapeutics Committee
Emergency Department Representative
Carswell Regional Hospital, Fort Worth, Texas

1994–2006 Director, Trauma Anesthesia

Department of Anesthesiology
Johns Hopkins Hospital, Baltimore, Maryland

1995–1996 Director, Performance Improvement Committee
Surgical Intensive Care Unit
Johns Hopkins Hospital, Baltimore, Maryland

1995–1996 Director, Intermediate Care Unit
Department of Surgery
Johns Hopkins Hospital, Baltimore, Maryland

2003–2005 Associate Director, Residency Program
Department of Anesthesiology and Critical Care Medicine
Johns Hopkins Hospital, Baltimore, Maryland

RECOGNITION

Honors

1985 Alpha Omega Alpha Research Forum
1990 Summa Cum Laude