# Curriculum Vitae


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| Name: | Brian S. Donahue |
| Office Phone: | 615-936-6808 |
| Office Fax: | 661-457-3506 |
| Office Address: | 2200 Children's Way, Suite 3115<br>Nashville Tennessee, 37232-9070 |
| Work Email: | brian.donahue@vanderbilt.edu |


## Education

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|---|---|
| 08/1981 - 04/1985 | B.S. in Mathematics from University of Dayton, Dayton, OH |
| 08/1981 - 04/1985 | B.A. in Chemistry from University of Dayton, Dayton, OH |
| 08/1985 - 1990 | Ph.D. in Pharmacology from Emory University, Atlanta, GA |
| 08/1985 - 1992 | M.D. in Medicine from Emory University, Atlanta, GA |

## Training

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|---|---|
| 06/1992 - 06/1993 | Internship in Internal Medicine from Mayo Graduate School of Medicine, Rochester, MN |
| 07/1993 - 06/1996 | Residency in Anesthesiology from Mayo Graduate School of Medicine, Rochester, MN |
| 07/1996 - 06/1997 | Fellowship in Cardiothoracic Anesthesiology from Vanderbilt University School of Medicine, Nashville, TN |

## Licensure and Certification

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|---|---|
| 1992 - 1996 | Medical, American Medical Association |
| 1993 - 1993 | Medical, Minnesota Medical License of Minnesota United States (36265) |
| 06/1996 - Present | Medical, Tennessee Medical License of Tennessee United States (27963) |
| 1997 - Present | Medical, Diplomate, American Board of Anesthesiology United States (28719) |

## Academic Appointments

| | |
|---|---|
| 07/1996 - 06/1997 | Instructor, Vanderbilt University (Nashville, Tennessee) |
| 07/1997 - 12/2004 | Assistant Professor, Vanderbilt University (Nashville, Tennessee) |
| 01/2005 - 12/2007 | Associate Professor, Vanderbilt University (Nashville, Tennessee) |
| 07/2008 - Present | Associate Professor of Anesthesiology, Vanderbilt University (Nashville, Tennessee) |
| 07/2009 - Present | Associate Professor of Pediatrics, Vanderbilt University (Nashville, Tennessee) |

## Hospital Appointments

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|---|---|
| 07/2007 - 06/2012 | Associate Professor, Vanderbilt University School of Medicine (Nashville, Tennessee) |

## Professional Organizations

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| 1992 - 1996 | American Medical Association |

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| 1996 | Society of Cardiovascular Anesthesiologists |
| 1996 - 2000 | American Society of Anesthesiologists |
| 1997 | International Anesthesia Research Society |
| 1999 | Perioperative Transesophageal Echocardiography, National Board of Echocardiography |
| 2003 - 2007 | IARS Clinical and Scientific Congress, Abstract Reviewer |
| 2004 | Association of Cardiac Anesthesiologists |
| 2008 | Tennessee Society of Anesthesiologists |

## Professional Activities

### Intramural

| | |
|---|---|
| 1997 - 2000 | 1997-2000 Anesthesiology Resident Education Committee, Anesthesiology, Committee member |
| 2000 - 2001 | 2000-2001 Hospital Pharmacy and Therapeutics Committee, Pharmacology, Committee Member |
| 2002 - 2003 | University Institutional Review Board, Medicine, Board Member |
| 2002 - 2005 | Blood Utilization Committee, Committee Member |
| 2004 - 2006 | Committee on Rational use of Recombinant FVIIa, Committee Member |
| 01/2010 - Present | REACH Committee: Research emphasis on Anesthesia at Children's Hospital, Anesthesiology, Chair, Promote research activity at VCH |
| 07/2011 - 06/2012 | VACRAC, Anesthesiology, Review of research efforts for faculty. 9 protocol reviews in academic year 2011-12., Member |

### Extramural

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|---|---|
| 06/2011 | Ad-hoc Reviewer for Thrombosis and Haemostasis |
| 06/2011 | Ad-hoc Reviewer for Critical Care Medicine |
| 06/2011 | Ad-hoc Reviewer for Circulation |
| 06/2011 | Ad-hoc Reviewer for Anesthesia & Analgesia |
| 2000 - 2002 | Pharmacia / Pfizer National Advisory Panel, Anesthesiology, Review data for COX-2 inhibitor, Reviewer |
| 2003 - 2005 | SCA Program Committee, Anesthesiology |
| 2003 - 2005 | American Heart Association, Study Section 2A: Lipids, thrombosis, vascular biology, Grant Review |
| 2004 - Present | SCA Abstract Reviewer, Clinical and Basic Science Starter Grants, Grant Review |
| 2009 - 2011 | SCA Program Committee, Society of Cardiovascular Anesthesiologists, Member |
| 06/2010 - 06/2011 | Ad-hoc Reviewer for Pediatrics |
| 07/2011 - 06/2012 | Reviewer for Journal of Cardiothoracic and Vascular Anesthesia |
| 07/2012 - 01/2013 | Ad-hoc Reviewer for Journal of Thoracic and Cardiovascular Surgery |
| 07/2012 - 01/2013 | Ad-hoc Reviewer for Journal of Thrombosis and Haemostasis |
| 07/2012 - 01/2013 | Ad-hoc Reviewer for Anesthesiology |

## Teaching Activities

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|---|---|
| 03/1993 - 1993 | Alcohol, drugs, and peer pressures, Lecturer, Preston Elementary School, Preston, Minnesota |
| 1994 - 1994 | Anesthesia for routine labor and delivery and Cesarean delivery, Lecturer, Rochester Community College |
| 04/1994 - 1994 | Clinical Use of Pulmonary Artery Catheters, Lecturer, Mayo Medical Center |
| 05/1994 - 1994 | Care of the Patient with Malignant Hyperthermia, Lecturer, Mayo Medical Center; Department of Nursing |
| 1997 - 2004 | Anesthesiology Lecture Series: Cardiac Anesthesia and Coexisting Disorders, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: Cardiovascular Pharmacology and Physiology, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: Use of Anesthesia Induction Agents, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: Pressors and Inotropes, Lecturer, Vanderbilt University |

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| 1997 - 2004 | Anesthesiology Lecture Series: Blood Component Therapy, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: CPB and Coagulation, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: Coagulation and Transfusion practices, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: Recombinant fVIIa for cardiac surgery, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: Anesthesia for congenital heart operations, Lecturer, Vanderbilt University |
| 1997 - 2004 | Anesthesiology Lecture Series: Anesthesia for Thoracic Surgery, Lecturer, Vanderbilt University |
| 04/1998 - 04/2008 | Medical Pharmacology: IV anesthetic agents and muscle relaxants, Lecturer, Light Hall, Yearly lecture before module development |
| 04/1998 - 04/2008 | Medical Pharmacology: Volatile Anesthetic Agents, Instructor, Light Hall, Yearly lecture to medical students before module development |
| 2007 - 2007 | Anesthesiology Lecture Series: Putting your Child to Sleep, Lecturer, Vanderbilt University |
| 11/2010 - 06/2011 | Anesthetic considerations for children with CHD having noncardiac surgery, Lecturer, VCH, Tuesday, 9 November 2010 Thursday, 17 February 2011 Monday, 25 April 2011 |
| 08/2011 - Present | Fellow Lecture: Cardiac Embryology & Segmental Anatomy, Lecturer, Vanderbilt Medical Center, 16 August 2010, 09 August 2011 |
| 12/2011 - Present | Oral Boards Examiner, Examiner, Light Hall, Session on Dec 15, 2011 Session on April 10, 2012 Session on Feb 12, 2013 |
| 02/2012 - Present | REACH committe presentations: How to Review a Manuscript, Lecturer, VCH, Lecture to REACH members: 21 Feb 2012 |
| 03/2012 - Present | Brain and Behavior module: Volatile anesthetic agents, Lecturer, Vanderbilt University School of Medicine, Yearly lecture to medical students: April 2009 April 2010 April 2011 March 27, 2012: 10AM light hall April 2011 March 2012 April 2011 April 2011 |
| 03/2012 - Present | Brain and Behavior module: IV Anesthetic Agents and Muscle Relaxants, Lecturer, Light Hall, Yearly lecture to medical students: April 2009 April 2010 April 2011 March 27, 2012: 11AM light hall April 2011 March 2012 |
| 04/2012 - Present | Fellow Lecture: Coagulation & Pediatric CPB, Lecturer, Vanderbilt Medical Center, 30 August 2010 11 April 2012, 6:30 AM 08 Nov 2012 |
| 04/2012 - Present | Coagulation and Blood Transfusion, Lecturer, VCH, Thursday, 14 October 2010 Lecture April 11, 2012 lecture 08 Jan 2013 lecture |
| 05/2012 - Present | REACH committe presentations: How to Write a Manuscript, Lecturer, VCH, Lecture to REACH members: 15 May 2012, 16 Oct 2012 |
| 07/2012 - Present | How (not) to Give a Talk, Fellows and Faculty, Lecture at REACH meeting 17 July 2012 |
| 11/2012 - 11/2012 | MD / PhD Career Options, Discussion Coordinater, Vanderbilt University, Light Hall, Southeast Medical Scientist Symposium 2012 Meeting, invited request to facilitate discussion about career options |
| 01/2013 - Present | Classification of Congenital Heart Disease, Instructor, VCH, New lecture series designed with Eileen Griffin to teach CRNAs about cardiac physiology, and train them for noncardiac surgery in pediatric patients with congenital heart disease. Lecture given on 6/5/2013 |
| 01/2013 - Present | CRNA Training for Noncardiac Operations in Cardiac Patients: Fetal Circulation, Instructor, VCH, New lecture series designed with Eileen Griffin to teach CRNAs about cardiac physiology, and train them for noncardiac surgery in pediatric patients with congenital heart disease. Lecture given on 1/2/2013 |

## Research Supervision / Mentorship

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|---|---|
| 05/2001 - 08/2001 | Colleen Pepper, B.S. (Undergraduate, Research) |
| 05/2002 - 08/2002 | Ayile Perry, B.S. (Undergraduate, Research) |
| 05/2002 - 08/2002 | Stephen Choate, B.S. (Undergraduate, Research) |
| 2004 - 2005 | Adam Tibble, M.D. (Medical Student, Research) |
| 06/2010 - 08/2010 | Nicole Frazier, B.S. (Undergraduate, Research) |
| 06/2010 - 06/2011 | Thanh Nguyen, M.D. Vanderbilt University, Current Position: Assistant Professor. (Faculty, Research) |
| 08/2010 - 08/2010 | Mentoring Session with Matt Weinger, M.D., Ph.D. Vanderbilt Medical Center, Current Position: Associate Professor. (Faculty, General Mentorship) |
| 10/2010 - 06/2011 | Brent McNew, M.D. Vanderbilt University, Current Position: Resident in Anesthesiology. (Medical Student, Research) |

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| 05/2011 - Present | Isaac Chocron, M.D. Vanderbilt University, Current Position: Medical Student. (Medical Student, Research) |
| 05/2011 - 08/2011 | Mike Kreger, M.D. East Tennessee State University College of Medicine, Current Position: Medical Student. (Medical Student, Research) |
| 05/2011 - 09/2011 | Paula Marincola, M.D. Vanderbilt University, Current Position: Medical Student. (Medical Student, Research) |
| 07/2011 - Present | Brent McNew, M.D. Vanderbilt University: Received reserach award from AAP in January 2013, Current Position: CA-1 resident. (Resident, Research) |
| 05/2012 - Present | Brendan Hayes Vanderbilt University, Current Position: Medical Student. (Medical Student, Research) |
| 05/2012 - 08/2012 | Raj Bant Meharry Medical College. (Medical Student, Research) |
| 01/2013 - Present | Jackie Shuplock, M.D. Vanderbilt University MSCI program, Current Position: Fellow in Pediatric Cardiology; MSCI candidate. (Post-doc Fellow, Research) |

## Other Significant Activities

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| 1988 | Crossed the United States on bicycle : 23 June - 20 July |
| 1992 | Dominican Republic; Flying Doctors of America: Atlanta, GA |
| 1995 | Dominican Republic; Flying Doctors of America : Atlanta, GA |
| 1998 | Guatemala; Heart Care International: Greenwich, CT |
| 02/2003 | Press Release: Gene type cuts risk of bleeding after surgery: Reuters Health Information - http://www.reutershealth.com/archive/2003/02/24/eline/links/20030224elin005.html |
| 01/2004 | Press Release: Genetic Factor May Predispose Patients to Repeat CABG Risk: Anesthesiology News - http://www.anesthesiologynews.com/indexpub.cfm?pubid=3 |

## Grants and Funding

U01 HL65962 09/2001 - 08/2005
NIH/NHLBI ::: Vanderbilt Univeristy Medical Center
Pharmacogenomics of Arrhythmia Therapy
Role: Co-Investigator
Total Cost: $1,963,384.00

1 K23-HL04476-01 01/2002 - 12/2005
NIH/NHLBI Vanderbilt University Medical Center
The Role of Coagulation System Variability in Cardiac Surgery
Role: Principal Investigator
Total Cost: $140,009.00

Grant number unavailable Brian S. Donahue (PI) 05/2011 - 05/2013
VICTR
Thrombin Generation Phenotypes in Congenital Heart Disease
Role: Principal Investigator
Total Cost: $2,614.00

Grant number unavailable Brian S. Donahue (PI) 05/2011 - 05/2013
Anesthesia Innovation Program
Thrombin Generation Phenotypes in Congenital Heart Disease
Role: Principal Investigator
Total Cost: $4,750.00

## Honors / Awards

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| 1981 | Presidential Scholarship, University Scholar, University Honors Program, University of Dayton |
| 1984 | Pi Mu Epsilon Mathematics Award, University of Dayton |
| 1985 | Woodruff Fellowship, Medical Scientist Training Program, Emory University |
| 1985 | Magna Cum Laude, University of Dayton |
| 1996 | Cardiothoracic Anesthesia Fellowship, Vanderbilt University |
| 2000 | 2000 Foundation for Anesthesia Education and Research: Clinical Research Starter Grant., Clinical Research, The Role of Genetic Polymorphisms in Cardiac Surgery Outcome. Total direct: $25,000. |
| 2001 | Vanderbilt Physician Scientist Development Program, Vanderbilt, Coagulation System Variability in Cardiac Surgery. |

# Publications

## Peer Reviewed Publications

### Research Articles

1. Margaret C. Etter, Donald A. Jahn, Brian S. Donahue, Ruth B. Johnson, Charles Ojala. Growth and Characterization of Small Molecule Organic Crystals. Journal of Crystal Growth 1986; 645-655.
2. Brian S. Donahue, Ronald F. Abercrombie. Free diffusion coefficient of ionic calcium in cytoplasm. Cell Calcium 1987; 8(6) PMID: 3435913.
3. Brian S. Donahue, Edward T. Morgan. Effects of vanadate on hepatic cytochrome P-450 expression in streptozotocin-diabetic rats. Drug Metab Dispos 1990; 18(4) PMID: 1698138.
4. Brian S. Donahue, Edward T. Morgan. Regulation of Sex-Specific Cytochrome P-450 Expression in Diabetes. FASEB Journal 1990; 4(7):A2244.
5. **Donahue, BS**, Skottner-Lundin, A, Morgan, ET. Growth hormone-dependent and -independent regulation of cytochrome P-450 isozyme expression in streptozotocin-diabetic rats. Endocrinology 1991; 128(4):2065-2076. PMID: 1706265.
6. Ferguson, NL, **Donahue, BS**, Tenney, KA, Morgan, ET. Pretranslational induction of CYP4A subfamily gene products in diabetic rats and reversal by oral vanadate treatment. Drug Metab Dispos 1993; 21(4) PMID: 8104136.
7. **Donahue, BS**, Byrne, DW, Gailani, D, George, AL. Tissue factor and platelet glycoprotein Ib-alpha alleles are associated with age at first coronary bypass operation. Anesthesiology 2003; 99(6) PMID: 14639140.
8. **Donahue, BS**, Gailani, D, Higgins, MS, Drinkwater, DC, George, AL. Factor V Leiden protects against blood loss and transfusion after cardiac surgery. Circulation 2003; 107(7) PMID: 12600914.
9. **Donahue, BS**. The response to activated protein C after cardiopulmonary bypass: impact of factor V leiden. Anesth Analg 2004; 99(6) PMID: 15562039.
10. Lundquist, AL, Manderfield, LJ, Vanoye, CG, Rogers, CS, **Donahue, BS**, Chang, PA, Drinkwater, DC, Murray, KT, George, AL. Expression of multiple KCNE genes in human heart may enable variable modulation of I(Ks). J Mol Cell Cardiol 2005; 38(2) PMID: 15698834.
11. Motsinger, AA, **Donahue, BS**, Brown, NJ, Roden, DM, Ritchie, MD. Risk factor interactions and genetic effects associated with post-operative atrial fibrillation. Pac Symp Biocomput 2006; PMID: 17094271.
12. Bruehl, S, Chung, OY, **Donahue, BS**, Burns, JW. Anger regulation style, postoperative pain, and relationship to the A118G mu opioid receptor gene polymorphism: a preliminary study. J Behav Med 2006; 29(2) PMID: 16400534.
13. **Donahue, BS**, Gailani, D, Mast, AE. Disposition of tissue factor pathway inhibitor during cardiopulmonary bypass. J Thromb Haemost 2006; 4(5) PMID: 16689752.
14. Sambasivan, A, Tibble, A, **Donahue, BS**. Low arterial saturation is associated with increased sensitivity to activated protein C in children with congenital heart disease. J Cardiothorac Vasc Anesth 2006; 20(1) PMID: 16458211.
15. Pretorius, M, **Donahue, BS**, Yu, C, Greelish, JP, Roden, DM, Brown, NJ. Plasminogen activator inhibitor-1 as a predictor of postoperative atrial fibrillation after cardiopulmonary bypass. Circulation 2007; 116(11 Suppl) PMID: 17846288.
16. Darbar, D, Kannankeril, PJ, **Donahue, BS**, Kucera, G, Stubblefield, T, Haines, JL, George, AL, Roden, DM. Cardiac sodium channel (SCN5A) variants associated with atrial fibrillation. Circulation 2008; 117(15) PMID: 18378609 PMCID: 2365761.
17. Body, SC, Collard CD, Shernan SK, Fox AA, Liu K, Ritchie MD, Perry TE, Muehlschlegel JD, Aranki S, **Donahue BS**, Pretorius M, Estrada JC, Ellinor PT, Newton-Cheh C, Seidman CE, Seidman JG, Herman DS, Lichtner P, Meitinger T, Pfeufer A, Kääb S, Brown NJ, Rod. Variation in the 4q25 Chromosomal Locus Predicts Atrial Fibrillation After Coronary Artery Bypass Graft Surgery. Variation in the 4q25 Chromosomal Locus Predicts Atrial

Fibrillation After Coronary Artery Bypass Graft Surgery 2009; 2:499-506.

18. Kaab S, Darbar D, Witteman JCM, Dupuis J, Pfeufer A, Newton-Cheh C, Schnabel R, Makino S, Sinner MF, Kannankeril PJ, Beckmann BM, Choudry S, **Donahue BS**, et al. Large Scale Replication and Meta Analysis of Variants on Chromosome 4q25 Associate with Atrial Fibrillation. Large Scale Replication and Meta Analysis of Variants on Chromosome 4q25 Associate with Atrial Fibrillation 2009; 30:813-819.
19. Watanabe H, Kaiser DW, Makino S, MacRae CA, Ellinor PT, Wasserman BS, Kannankeril PJ, **Donahue BS**, Roden DM, Darbar D. ACE I/D polymorphism associated with abnormal atrial and atrioventricular conduction in lone atrial fibrillation and structural heart disease: implications for electrical remodeling. Heart rhythm : the official journal of the Heart Rhythm Society 2009; 6(9):1327-32. PMID: 19648063 PMCID: PMC2740737.
20. Watanabe H, Darbar D, Kaiser DW, Jiramongkolchai K, Chopra S, **Donahue BS**, Kannankeril PJ, Roden DM. Mutations in sodium channel beta1- and beta2-subunits associated with atrial fibrillation. Circulation. Arrhythmia and electrophysiology 2009; 2(3):268-75. PMID: 19808477 PMCID: PMC2727725.
21. Fox AA, Pretorius M, Liu KY, Collard CD, Perry TE, Shernan SK, De Jager PL, Hafler DA, Herman DS, DePalma SR, Roden DM, Muehlschlegel JD, **Donahue BS**, Darbar D, Seidman JG, Body SC, Seidman CE. Genome-wide assessment for genetic variants associated with ventricular dysfunction after primary coronary artery bypass graft surgery. PloS one 2011 Jul;6(9):e24593. PMID: 21980348 PMCID: PMC3184087.
22. Watkins S, Morrow SE, McNew BS, **Donahue BS**. Perioperative Management of Infants Undergoing Fundoplication and Gastrostomy After Stage I Palliation of Hypoplastic Left Heart Syndrome. Pediatric cardiology 2012 Feb; PMID: 22314367.
23. Albers E, **Donahue BS**, Milne G, Saville BR, Wang W, Bichell D, McLaughlin B. Perioperative plasma F(2)-Isoprostane levels correlate with markers of impaired ventilation in infants with single-ventricle physiology undergoing stage 2 surgical palliation on the cardiopulmonary bypass. Pediatric cardiology 2012 Apr;33(4):562-8. PMID: 22327227.

### Editorials

1. **Donahue, BS**, Balser, JR. Perioperative genomics. Venturing into uncharted seas. Anesthesiology 2003; 99(1) PMID: 12826835.
2. Suanne M. Daves, Brian S. Donahue. Review of: Ohye RG et al, Comparison of Shunt Types in Norwood Procedure for Single Ventricle Lesions, NEJM 2010, 362: 1980-92. CCAS Newsletter 2011 Mar.

### Review Articles

1. **Donahue, BS**. Factor V Leiden and perioperative risk. Anesth Analg 2004; 98(6) PMID: 15155315.
2. Morozowich, ST, **Donahue, BS**, Welsby, IJ. Genetics of coagulation: considerations for cardiac surgery. Semin Cardiothorac Vasc Anesth 2006; 10(4) PMID: 17200088.

### Letters

1. **Donahue, BS**. Thrombosis after deep hypothermic circulatory arrest with antifibrinolytic therapy: is factor V leiden the smoking gun. Anesthesiology 2002; 97(3) PMID: 12218560.

### Case Reports

1. **Donahue, BS**, Emerson, CW, Slaughter, TF. Case 1--1999. Elective and emergency cardiac surgery on a patient with hemophilia B. J Cardiothorac Vasc Anesth 1999; 13(1) PMID: 10069292.
2. Rosaleen Chun, John Haigh, Doug Seal, Man-Chiu Poon, Brian S. Donahue. Cardiac surgery in congenital afibrinogenemia with thrombo-occlusive disease. A case report and brief review. J Cardiothor Vasc Anesth 2005; 19(1):109-117.

### Abstracts

1. Brian S. Donahue, Edward T. Morgan. Vanadate Dissociates P-450 IIE1 Induction from P-450 IIC11 Repression in Diabetic Rats. The Pharmacologist 1989; 31(3):174.
2. Brian S. Donahue and Sean P. Donahue. A Mathematical Formula for Critical Value Determination. Clinical Research 1990; 38(2):693A.
3. Brian S. Donahue, Joshua P. Squiers, Alfred L. George. Genetic Variants of Platelet Glycoprotein Ib Correlate with Postoperative Blood Loss and Transfusion Requirements After Cardiac Surgery. Anesth Analg 2001; 92(4S):65.
4. **Donahue BS**, Darbar D, George AL, Li C, Brown NJ, Ritchie MD, Roden DM. Pharmacogenomics of Atrial Fibrillation. Clin Pharmacol Ther 2005; 2(P7):77.

## Non-Peer Reviewed Publications

### Research Articles

1. Agarwal HS, Saville BR, Slayton JM, **Donahue BS**, Daves S, Christian KG, Bichell DP, Harris ZL. Standardized

postoperative handover process improves outcomes in the intensive care unit: a model for operational sustainability and improved team performance*. Critical care medicine 2012 Jul;40(7):2109-15. PMID: 22710203.

2. Watkins SC, McNew BS, **Donahue BS**. Risks of noncardiac operations and other procedures in children with complex congenital heart disease. The Annals of thoracic surgery 2013 Jan;95(1):204-11. PMID: 23200239.
3. Whitney G, Daves S, Hughes AK, Watkins SC, Woods M, Kreger M, Marincola P, Chocron I, **Donahue BS**. Implementation of a Transfusion Algorithm To Reduce Blood Product Utilization In Pediatric Cardiac Surgery . Pediatric Anesthesia 2013 Jan.
4. Agarwal HS, Hardison DC, Saville BR, **Donahue BS**, Lamb FS, Bichell DP, Harris ZL. Residual lesions in postoperative pediatric cardiac surgery patients receiving extracorporeal membrane oxygenation support. The Journal of thoracic and cardiovascular surgery 2013 Apr; PMID: 23597724.

### Book Chapters

1. Brian S. Donahue, Jeffrey R. Balser. Cardiac Rhythm. Anesthetic Pharmacology, 2nd Edition (Evers, Maze, Kharasch). Editors: A. United States: Cambridge University Press; 2011 Apr; ISBN: 9780521896665.
2. Brian S. Donahue. Ch. 148: Anticoagulation and Reversal for Cardiopulmonary Bypass. ). In: FAUST S ANESTHESIOLOGY REVIEW, FOURTH EDITION (Thomas N. Spackman, MD, Editor. Editors: M. Maryland Heights, Missouri, United States: Elsevier; 2013 Aug.
3. Brian S. Donahue. Ch. 102: Red Blood Cell and Platelet Transfusion. FAUST S ANESTHESIOLOGY REVIEW, FOURTH EDITION . Editors: M. Maryland Heights, Missouri, United States: Elsevier; 2013 Aug.

## Presentations

### Panel Presentation

1. IARS 77th Clinical and Scientific Congress. IARS; 2003 Mar; Cardiothoracic and Vascular Basic Science Poster Sessions.
2. SCA 25th Annual Meeting and Workshops. SCA; 2003 Apr; Coagulation Variants in Cardiac Surgery.
3. IARS 78th Clinical and Scientific Congress. IARS; 2004 Feb; Poster Discussion Moderator: Circulation Basic Science.
4. Brian S. Donahue. SCA 9th Annual Update on Cardiopulmonary Bypass. SCA; Snowmass, Colorado. 2004 Mar; Tissue Factor Pathway Inhibitor: An Endothelial Protein Response.
5. Brian S. Donahue. SCA 9th Annual Update on Cardiopulmonary Bypass. SCA; Snowmass, Colorado. 2004 Mar; Stress Response to Neuraxial Blockade.
6. Brian S. Donahue. SCA 26th Annual Meeting and Workshops. SCA; Honolulu, Hawaii. 2004 Apr; Antiplatelet drugs to prevent MI: Anesthetic implications.
7. Brian S. Donahue. SCA 27th Annual Meeting and Workshops. SCA; Baltimore, Maryland. 2005 May; Hemostatic Challenges in Cardiac Surgery.
8. SCA 27th Annual Meeting and Workshops. SCA; Baltimore, Maryland. 2005 May; Emerging Paradigms for Perioperative Risk Assessment.
9. Brian S. Donahue. SCA 29th Annual Meeting and Workshops. SCA; 2007 May; Organ Protection for Deep Hypothermic Circulatory Arrest.
10. SCA 30th Annual Meeting and Workshops. SCA; 2008 Jun; Contemporary Issues in Vascular Anesthesia.
11. SCA 31st Annual Meeting. SCA; San Antonio, Texas. 2009 Apr; Future Trends in Anesthesiology (Panel organizer).
12. Brian S. Donahue. ASA 2010 Annual Meeting. ASA; San Diego, California. 2010 Oct; Anesthesia and the Hypercoagulable Patient.
13. SCA 33rd Annual Meeting. SCA; Savannah, Georgia. 2011 May 2; Pharmacology Update (Panel organizer).

### Presentations at Scientific Meetings

1. Brian S. Donahue, Edward T. Morgan. American Society for Pharmacology and Experimental Therapeutics 1989 Meeting. ASPET; Salt Lake City, Utah. 1989 Aug; Vanadate Dissociates P-450 IIE1 Induction from P-450 IIC11 Repression in Diabetic Rats.
2. Brian S. Donahue, Edward T. Morgan. American Society for Biochemistry and Molecular Biology 1990 Meeting. ASBMB; New Orleans, Louisiana. 1990 Jun; Regulation of Sex-Specific Cytochrome P-450 in Diabetes.
3. Brian S. Donahue, Edward T. Morgan. 8th Annual Symposium on Microsomes and Drug Oxidations. Karolinska Institute; Stockholm, Sweden. 1990 Jun; Growth Hormone-Dependent and -Independent Regulation of Cytochrome P-450 Isozymes in Diabetes.
4. Edward T. Morgan, Brian S. Donahue, Kirsten A. Tenney, Nikita L. Ferguson. American Society for Biochemistry and Molecular Biology 1993 Meeting. ASBMB; 1993 Jun; Pretranslational Induction of CYP 4A1 in Diabetic Rats

and Reversal by Oral Vandate Treatment.

5. Brian S. Donahue, Joshua P. Squiers, Alfred L. George. Society of Cardiovascular Anesthesiologists 23rd Annual Meeting. SCA; Vancouver, Canada. 2001 May; Genetic Variants of Platelet Glycoprotein Ib Correlate with Blood Loss and Transfusion Requirements After Cardiac Surgery.
6. Brian S. Donahue, Alfred L. George. Association of University Anesthesiologists. AUA; Milwaukee, Wisconsin. 2001 May; Genetic Variants of Platelet Glycoprotein Ib and Blood Loss after Cardiac Surgery.
7. Brian S. Donahue. Tennessee Perfusion Association 2001 Meeting. TPA; Nashville, Tennessee. 2001 Oct; Hemostasis Management for the Genetically Challenged.
8. Brian S. Donahue, Colleen M. Pepper, Rasheeda K. Stephens, Rand S. Valery, Alfred L. George. Society of Cardiovascular Anesthesiologists 24th Annual Meeting. SCA; 2002 Apr; Tissue Factor Promoter Polymorphisms and Coronary Events in a Cardiac Surgery Population.
9. Brian S. Donahue, Davis C. Drinkwater, Alfred L. George. Association of University Anesthesiologists. AUA; Nashville, Tennessee. 2002 Apr; Tissue Factor Promoter Polymorphisms and Coronary Events in a Cardiac Surgery Population.
10. Brian S. Donahue. Association of Cardiovascular Anesthesiologists 31st Annual Meeting. ACA; 2002 Oct; Factor V Leiden in Cardiac Surgery.
11. Brian S. Donahue. Greenbrier Meeting: Eighth Annual Advances in Physiology and Pharmacology in Anesthesia and Critical Care. Wake Forest University School of Medicine; White Sulphur Springs, West Virginia. 2002 Nov; Genetics of Coagulation: Response to Cardiopulmonary Bypass.
12. Brian S. Donahue. Tennessee Association of Nurse Anesthetists 2002 Meeting. TANA; Nashville, Tennessee. 2002 Nov; New Perspective in Pain Management.
13. Brian S. Donahue, David Gailani, Alfred L. George. International Anesthesia Research Society 2003 Meeting: 77th Clinical and Scientific Congress. IARS; 2003 Mar; Best of the Meeting Sessions: Factor V Leiden Protects Against Blood Loss and Transfusion Following Cardiac Surgery.
14. Brian S. Donahue, Alfred L. George. Society of Cardiovascular Anesthesiologists 25th Annual Meeting. SCA; 2003 Apr; Tissue Factor -1208 I/I Genotype and Repeat Coronary Bypass Surgery.
15. Garry Walker, Brian S. Donahue. American Society of Anesthesiologists 2003 Meeting. ASA; 2003 Oct; Dexmedetomidine and Bariatric Surgery.
16. Arathi Sambasivan, Brian S. Donahue. Society of Pediatric Anesthesiologists 2004 Meeting. SPA; 2004 Mar; Risk Factors for Activated Protein C Resistance in Patients with Congenital Heart Disease.
17. Brian S. Donahue, Nancy J. Brown, Dan M. Roden. Pharmacogenomics Research Network Annual Meeting. PGRN; 2004 Mar; Risk Factors for Postoperative Atrial Fibrillation Following Cardiac Surgery.
18. Brian S. Donahue. International Anesthesia Research Society 2004 Meeting. IARS; 2004 Mar; Factor V Leiden is Associated with Increased Number ofCoronary Grafts in a Population of Coronary Artery Bypass Surgery Patients.
19. SCA 26th Annual Meeting and Workshops. SCA; Honolulu, Hawaii. 2004 Apr; Poster Discussion Moderator: Coagulation and Hemostasis.
20. Brian S. Donahue, Daniel W. Byrne. Society of Cardiovascular Anesthesiologists 26th Annual Meeting. SCA; 2004 Apr; Factor VII Levels During Cardiopulmonary Bypass Correlate with Factor VII Genotypes and Thrombin Generation.
21. Brian S. Donahue. Society of Cardiovascular Anesthesiologists 26th Annual Meeting. SCA; 2004 Apr; Measurement of Activated Factor VII During Cardiopulmonary Bypass Needs to Account for the Presence of Tissue Factor Pathway Inhibitor.
22. Brian S. Donahue. Society of Cardiovascular Anesthesiologists 26th Annual Meeting. SCA; 2004 Apr; Truncated Forms of Tissue Factor Pathway Inhibitor Contribute to Post-CPB Coagulopathy.
23. Brian S. Donahue, Marylyn D. Ritchie, Dan M. Roden. Cold Spring Harbor Research Laboratories Pharmacogenomics Symposium. PGRN; Cold Spring Harbor, New York. 2004 Nov; Postoperative Atrial Fibrillation: Assoications Detected by Multifactor Dimensionality Reduction.
24. Brian S. Donahue. Society for Technology in Anesthesia Annual Meeting. Society for Technology in Anesthesia; 2005 Jan; Genomics: A Critical Anesthesia Technology.
25. Saeedah Asaf, Brian S. Donahue. Society of Pediatric Anesthesiologists 2005 Meeting. SPA; 2005 Feb; Factor VII Antigen Levels in Children with Congenital Heart Disease Vary with F7 Genotype and Arterial Saturation.
26. Brian S. Donahue, Dan M. Roden. Society of Cardiovascular Anesthesiologists 27th Annual Meeting. SCA; 2005 May; Inflammatory Cytokine Polymorphisms are Associated with Beta Blocker Failure in Preventing Postoperative Atrial Fibrillation.
27. Body, Collard, Shernan, Fox, Liu, Ritchie, Perry, Muehlschlegel, Arnki, Seidman, Seidman, Donahue, Hermann, Lichtner, Meitinger Estrada, Pretorius, Ellinor, Brown, Roden, Darbar. American Heart Association Scientific Sessions. AHA; 2008 Aug; Variations in the 4q25 Chromosomal Locus Predict New Onset Atrial Fibrillation After Cardiac Surgery.
28. Brian S. Donahue. Refresher course lecture. ASA Annual Meeting; Orlando, Florida. 2008 Oct; Management of Intraoperative Arrhythmias.
29. Scott Watkins, Stephen E. Morrow, Brian S. Donahue. Society of Pediatric Anesthesiologists 2011 Meeting.

SPA; San Diego, California. 2011 Mar; Perioperative Management of Infants Undergoing Fundoplication and Gastrostomy Following Stage I Palliation of Hypoplastic Left Heart Syndrome.

30. Fox, Pretorius, Lin, Collard, Perry, Shernan, DeJager, Hafler, Herman, Roden, Muehlschlegel, Donahue, Darbar, Deidman, Deidman, Body. Society of Cardiovascular Anesthesiologists 33rd Annual Meeting. SCA; Savannah, Georgia. 2011 Apr; Best in Session: Genome-Wide Assessment for Genetic Variants Associated with Ventricular Dysfunction After Primary Cornoary Artery Bypass Graft Surgery.
31. Delaney JT, Jeff JM, Okafor H, Floyd M, Donahue BS, Pretorius M, Brown NJ, Roden DM, Crowford DC, Darbar D. Heart Rhythm Society 2011 Meeting. Heart Rhythm Society; 2011 May; Fine-mapping AF Susceptibility Genomic Regions in African Americans.
32. Brian S. Donahue. International Congress of Cardiology. BIT Congress, Inc.; Beijing, China. 2011 Dec 6; Thrombosis in Congenital Heart Disease.
33. Isaac Chocron. Emphasis program 2012. VUMC Emphasis Program; Nashville, Tennessee. 2012 Apr; Cryoprecipitate transfusion does not increase plasma fibrinogen levels in children following cardiac surgery.
34. Lorninc A, Landsman I, Donahue BS, Franklin D. International Assembly for Pediatric Anestheisa Meeting. IAPA; Washington, Dist. Of Col.. 2012 Oct 11; Malignant Hyperthermia in a Two Month Old Child with Holt-Oram Syndrome Undergoing Cardiac Surgery.
35. Kalra Y, Donahue B. American Heart Association Scientific Sessions. AHA; Los Angeles, California. 2012 Nov 6; Thrombosis and risk for mortality among children with single ventricle physiology following initial palliative surgery.
36. Watkins SC, McNew BS, Donahue BS. Society for Pediatric Anesthesia / Congenital Cardiac Anesthesia Society Annual Meeting. SPA / CCAS; Las Vegas, Nevada. 2013 Mar; Risks of noncardiac operations and other procedures in children with complex congenital heart disease..
37. Shelton J, Franklin D, Donahue BS. Society for Pediatric Anesthesia / Congenital Cardiac Anesthesia Society Annual Meeting. SPA / CCAS; Las Vegas, Nevada. 2013 Mar; Perioperative Management of a Pediatric Patient with Catecholamine-Induced Cardiomyopathy and Biventricular Assist Devices..
38. Watkins SC, Williamson K, Davidson M, Donahue BS.. Society for Pediatric Anesthesia / Congenital Cardiac Anesthesia Society Annual Meeting. SPA / CCAS; Las Vegas, Nevada. 2013 Mar; Risk Factors and Mortality Associated with Acute Kidney injury in Children Following Congenital Cardiac Surgery..
39. Hughes AK, Donahue BS.. Society for Pediatric Anesthesia / Congenital Cardiac Anesthesia Society Annual Meeting. SPA / CCAS; Las Vegas, Nevada. 2013 Mar; Use of dynamic ultrasound for arterial line placement in pediatric subjects.

## Internal Grand Rounds

1. Brian S. Donahue. Vanderbilt University Grand Rounds. Vanderbilt University Department of Cardiac Surgery; Nashville, Tennessee. 1998 Oct; International Perspectives in Anesthesiology: Congenital Heart Repairs in Developing Countries.
2. Brian S. Donahue. Vanderbilt University Grand Rounds. Department of Clinical Pharmacology; Nashville, Tennessee. 2003; Perioperative Genomics.
3. Brian S. Donahue. Vanderbilt University Department of Anesthesiology; Nashville, Tennessee. 2004 Aug; Perioperative Implications of Coagulation Phenotype: Where the Genetic Rubber Meets the Surgical Road.

## Invited Presentation - Local

1. Donahue BS. PHI Research Conference. Pediatric Heart Institute; Nashville, Tennessee. 2012 Oct 19; Thrombosis in Single Ventricle Patients.
2. Donahue BS. PHI Monthly MMI Meeting. Pediatric Heart Institute; Nashville, Tennessee. 2012 Nov 14; Thrombosis in Congenital Heart Patients: The Vanderbilt Experience.

## Invited Presentation - Other

1. Brian S. Donahue. Ion Channel Interest Group. Clinical Pharmacology; Nashville, Tennessee. 2005 Jan; Atrial Fibrillation Following Cardiac Surgery.

## External Grand Rounds

1. Brian S. Donahue. University of Chicago Grand Rounds. University of Chicago Department of Anesthesiology; Chicago, Illinois. 1995 Oct; Cofactors, Free Radicals, and Second Messengers: Recent Studies on Endothelial-Dependent Vasorelaxation.
2. Brian S. Donahue. Mayo Medical Center Grand Rounds. Mayo Medical Center Department of Anesthesiology; Rochester, Minnesota. 2001 Sep; New Frontiers in Anesthesiology: The Impact of Genetics.
3. Brian S. Donahue. Duke University Grand Rounds. Duke University Department of Anesthesiology; Durham, North Carolina. 2002 Jul; Genetic Variability of the Coagulation System in Cardiac Surgery.
4. Brian S. Donahue. Washington University Grand Rounds. Washington University Department of Anesthesiology; St Louis, Missouri. 2002 Dec; Factor V Leiden in Cardiac Surgery.
5. Baylor University Grand Rounds. Baylor University Department of Anesthesiology; Houston, Texas. 2003 Sep;

New Perspectives in Cardiovascular Anesthesia: Perioperative Genomcis.

6. Brian S. Donahue. Mayo Clinic Jacksonville Grand Rounds. Mayo Clinic Jacksonville Department of Anesthesiology; Jacksonville, Florida. 2004 Dec; Genomic Applications in Cardiac Surgery.