

# Curriculum Vitae

Name: Susan S. Eagle

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## Training

1994	B.S. in Microbiology from University of Georgia, GA United States
1999	M.D. in Medicine from Medical College of Georgia, GA United States
1999 - 2000	Internship in Internal Medicine from The Medical College of Georgia, Augusta, GA
2000 - 2003	Residency in Anesthesiology from The Medical College of Georgia, Augusta, GA
2004 - 2005	Fellowship in Cardiothoracic Anesthesiology/Pediatric Congenital Heart/Perioperative Echocardiography from Vanderbilt University School of Medicine, Nashville, TN 37232

## Licensure and Certification

04/2004 - 12/2014	Boards, American Board of Anesthesiology United States (36626)
06/2005 - 06/2015	Boards, National Board of Echocardiography United States (2005-057)
07/2008 - 08/2011	DEA, Practioner of Tennessee United States (BE8180363)
06/2010 - 06/2012	Medical, Tennessee State Medical License of Tennessee United States (MD 37180)

## Academic Appointments

07/2003 - 06/2010	Assistant Professor of Clinical Anesthesiology, Vanderbilt University (Nashville, Tennessee)
2006 - 2009	Director, Cardiothoracic Anesthesiology Resident Rotation, Anesthesiology, Division of Cardiothoracic Anesthesia, Vanderbilt University (Nashville, Tennessee)
2006 - 2008	Director, Resident Mentorship Program, Anesthesiology, Division of Cardiothoracic Anesthesia, Vanderbilt University (Nashville, Tennessee)
2007 - 2009	Assistant Residency Program Director, Anesthesiology, Division of Cardiothoracic Anesthesia, Vanderbilt University (Nashville, Tennessee)
07/2010 - 10/2013	Associate Professor of Clinical Anesthesiology, Vanderbilt University (Nashville, Tennessee)
10/2013 - Present	Associate Professor of Anesthesiology, Vanderbilt University (Nashville, Tennessee)

## Hospital Appointments

2008 - Present	Assistant Director, Thoracic Anesthesiology, Anesthesiology, Division of Cardiothoracic Anesthesia, Vanderbilt University (Nashville, Tennessee)
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## Other Work Experience

08/2013 - Present	Faculty Advisory Committee for the Center for Technology Transfer and Commercialization, Center for Technology Transfer and Commercialization, Vanderbilt University (Nashville, Tennessee)
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## Professional Organizations

2003	American Society of Anesthesiologists
2005	American Society of Echocardiography
2006	Society for Education in Anesthesiology
2007	Tennessee Society of Anesthesiologists
2011	Society of Cardiovascular Anesthesiologists

## Professional Activities

### Intramural

2003 - 2009	Residency Clinical Competency Committee, Anesthesiology, Member
2005 - Present	Residency Admissions Committee, Anesthesiology, Member
2005 - Present	Residency Education Committee, Anesthesiology, Member
2006 - 2007	Faculty Clinical Compensation Committee, Anesthesiology, Member, Created an faculty compensation plan based on RVU productivity
01/2006 - 01/2008	Intraoperative Electronic Transesophageal Echocardiography Report Team, Member
09/2008 - Present	Thoracic Surgery Resident Competency Committee, Member
2010 - Present	QMMI Committee, Anesthesiology
02/2012 - Present	QA Committee, central line injury prevention
04/2013 - Present	VADTEC, Anesthesiology

### Extramural

2008 - Present	Editorial Board Member: Anesthesiology Continuing Education (ACE/ASA)
08/2008 - Present	Committee on Anesthesiology Continuing Education, American Society of Anesthesiology, Editorial Board Member
05/2010 - 05/2010	Ad-hoc Reviewer for European Journal of Clinical Investigation.
10/2010 - 10/2010	Ad-hoc Reviewer for Liver Transplantation.
07/2012 - 08/2012	Reviewer for NY CAP Research Alliance Review
09/2012 - Present	Vitalnx, Corp., Chief Medical Officer, CMO
02/2013 - Present	InvisionHeart, CORP, Co-founder and CMO, Chief Medical Officer

## Teaching Activities

2003 - 2005	Mock Oral Boards, Director
2003 - 2009	Mock Oral Boards, Mock oral board examiner
2004 - 2006	Residency Mentorship Program, Director
2006 - Present	Cardiothoracic Anesthesia Fellows Lecture Series: Advanced perioperative transesophageal echocardiography training, Instructor/Moderator, VUMC
2006 - 2006	Facilitating teaching and learning between faculty and residents.
04/2006 - 04/2006	Critical Skills Course/Simulation; Diagnosis and Management of Shock, Instructor, Vanderbilt Center for Experiential Learning and Assessment (CELA) Simulation Technologies Program, Diagnosis and Management of Shock
07/2006 - Present	Cardiothoracic Anesthesia Written Examination: Question/Answer session for primary rotation., Moderator
07/2006 - 07/2006	Anesthesiology Departmental Resident Lecture Series: Resident Assessment and Clinical Competency Process., Instructor
07/2006 - 07/2006	Anesthesiology Departmental Resident Lecture Series: Evidence-Based Practice of Preoperative Evaluation., Instructor
07/2006 - 07/2006	Resident Rotation Lecture: Resident Assessment and Clinical Competency Process., Instructor, VUMC Nashville, TN
07/2006 - 07/2006	Resident Rotation Lecture: Evidence-Based Practice of Preoperative Evaluation., Instructor, VUMC Nashville, TN
08/2006 - 08/2006	Anesthesiology Departmental Resident Lecture Series: Mentorship: Teaching and Learning Seminar, Instructor
08/2006 - 08/2006	Resident Rotation Lecture: Mentorship: Teaching and Learning Seminar., Instructor, VUMC Nashville, TN

09/2006 - 2006	Resident Rotation Lecture: Topics-based Learning and Discussion. Facilitating teaching and learning between faculty and residents., Facilitating teaching and learning between faculty and residents., VUMC Nashville, TN
09/2006 - 09/2006	Critical Skills Course/Simulation; Diagnosis and Management of Shock, Instructor, Vanderbilt Center for Experiential Learning and Assessment (CELA) Simulation Technologies Program
03/2007 - 03/2007	Resident Rotation Lecture: Preparation for the anesthesiology certification examination., Instructor, VUMC
04/2007 - 04/2007	Critical Skills Course/Simulation; Diagnosis and Management of Shock, Instructor, Vanderbilt Center for Experiential Learning and Assessment (CELA) Simulation Technologies Program
05/2007 - 05/2007	Anesthesiology Departmental Resident Lecture Series: Cardiac Tamponade: Echocardiography Diagnosis and Management., Lecturer: Mini M&M Lecture Series, VUMC
05/2007 - 05/2007	Resident Rotation Lecture: Cardiac Tamponade: Echocardiography Diagnosis and Mgt., Instructor, VUMC Nashville, TN
06/2007 - 06/2007	Central Line Complication and Thrombosed Vein Graft During CABG, Lecturer: Mini M&M Lecture Series, VUMC
07/2007 - Present	Cardiothoracic Anesthesia Mock Oral Board Examination. Senior residents, CT rotation, Moderator, VUMC
07/2007 - 03/2007	Resident Rotation Lecture: Evidence-Based Practice of Preoperative Evaluation., Instructor, VUMC Nashville, TN
07/2007 - 07/2007	Malignant Hyperthermia., Lecturer: Mini M&M Lecture Series, VUMC
08/2007 - 08/2007	Unanticipated Pneumothorax in the ICU in Mobilized Patient., Lecturer: Mini M&M Lecture Series, VUMC
09/2007 - Present	Resident training, Intraoperative Transesophageal Echocardiography: The Basic Examination. ACC Guidelines. CA2-3rotation., Instructor, VUMC
09/2007 - 09/2007	Challenges in Remote Locations, Lecturer: Mini M&M Lecture Series, VUMC
09/2007 - 09/2007	Critical Skills Course/Simulation; Diagnosis and Management of Shock, Instructor, Vanderbilt Center for Experiential Learning and Assessment (CELA) Simulation Technologies Program
10/2007 - 10/2007	Anesthesiology Departmental Resident Lecture Series: Thoracic Anesthesia, Instructor, VUMC
10/2007 - 10/2007	Cardiac Arrest in Patient with Guillian Barre., Lecturer: Mini M&M Lecture Series, VUMC
10/2007 - 10/2007	Resident Rotation Lecture: Thoracic Anesthesia., Instructor, VUMC Nashville, TN
11/2007 - 10/2007	Anesthesiology Departmental Resident Lecture Series: Evidence-Based Practice of Cardiac Anesthesiology., Instructor, VUMC
11/2007 - 11/2007	PACU Disasters., Lecturer: Mini M&M Lecture Series, VUMC
11/2007 - 11/2007	Resident Rotation Lecture: Evidence-Based Practice of Cardiac Anesthesiology., Instructor, VUMC Nashville, TN
2008 - 2008	Faculty training / mentorship: Perioperative Transesophageal Echocardiography for Basic TEE Certification, Instructor, VUMC
02/2008 - 02/2008	Epidural Hematoma in a Hepatic Patient., Lecturer: Mini M&M Lecture Series, VUMC
03/2008 - 03/2008	Perioperative Myocardial Infarction during Lung Resection., Lecturer: Mini M&M Lecture Series, VUMC
03/2008 - 10/2008	Anesthesiology Departmental Resident Lecture Series: Pulmonary Hypertension: Problem Based Learning Lecture Series., Instructor, VUMC
04/2008 - 04/2008	Difficult Airway in Patient with Anterior Mediastinal Mass, Lecturer: Mini M&M Lecture Series, VUMC
07/2008 - 07/2008	ST-elevation and Denial, Lecturer: Mini M&M Lecture Series, VUMC
07/2008 - 07/2008	The Anesthesia Machine Check. CA-1 Resident Presentation, Instructor, VUMC
07/2008 - 07/2008	Resident Rotation Lecture: The Anesthesia Machine Check. CA-1 Resident Presentation., Instructor, VUMC Nashville, TN
08/2008 - 08/2008	Cesarian Section in Morbidly Obese Patient with PIH, Heart Failure., Lecturer: Mini M&M Lecture Series, VUMC
08/2008 - 08/2008	Resident Rotation Lecture: Review of ACC Guidelines for Perioperative Mgt. of Coronary Stents., Instructor, VUMC Nashville, TN
09/2008 - 09/2008	Induction of Patient with Esophagectomy and Gastric Outlet Obstruction, Lecturer: Mini M&M Lecture Series, VUMC
10/2008 - 10/2008	Pulmonary artery catheter complications and management., Lecturer: Mini M&M Lecture Series, VUMC
10/2008 - 10/2008	Resident Rotation Lecture: Pulmonary Hypertension: Problem Based Learning Lecture Series., Instructor, VUMC Nashville, TN
10/2008 - 10/2008	Resident Rotation Lecture: Review of ACC Guidelines for Perioperative Mgt. of Coronary Stents.,

	Instructor, VUMC Nashville, TN
11/2008 - 11/2008	Post Reperfusion Syndrome/ Takotsubo in Liver Transplant Patients., Lecturer: Mini M&M Lecture Series, VUMC
11/2008 - 11/2008	Perioperative TEE Assessment of the Mitral Valve., Moderator: Cardiothoracic Fellow Lecture Series, VUMC
11/2008 - 11/2008	Takotsubo Cardiomyopathy, Lecturer: Mini M&M Lecture Series, VUMC Nashville, TN
12/2008 - 12/2008	Mini M&M Lecture Series: PACU complications: Respiratory distress (retained throat pack)., Lecturer: Mini M&M Lecture Series, VUMC
02/2009 - 12/2009	AAA rupture: management in Kenya; Resident: Dan Nahrwald, Lecturer: Mini M&M Lecture Series, VUMC
09/2009 - 2009	Internship lecture: Cardiac physiology., Instructor, VUMC Nashville, TN
09/2009 - 09/2009	VUMC Perioperative Transesophageal Echocardiography and Pacemaker Workshop, Course Director, VUMC, Nashville, TN
12/2009 - 08/2009	Cardiothoracic Anesthesia Fellows Lecture Series: TEE Assessment of the Mitral Valve, Moderator: Cardiothoracic Anesthesia Fellowship Lecture Series, VUMC Nashville, TN
12/2009 - 12/2009	Cardiothoracic anesthesia fellow lecture: Hemodynamic assessment using TEE, Moderator: Cardiothoracic Anesthesia Fellowship Lecture Series, VUMC Nashville, TN
01/2010 - 01/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN
03/2010 - 03/2010	CABG, OPCAB vs. CPB, Instructor, Vanderbilt University Medical Center
03/2010 - 03/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN
05/2010 - 05/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN
06/2010 - 06/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN
07/2010 - 07/2010	Resident Rotation Lecture: The Anesthesia Machine Check. CA-1 Resident Presentation., Instructor, VUMC Nashville, TN
07/2010 - 07/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN
08/2010 - 2010	Internship (resident) lecture: Perioperative myocardial ischemia., Instructor, VUMC Nashville, TN
08/2010 - 08/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN
09/2010 - 2010	Internship (resident) lecture: Acute myocardial infarction: recognition and management, Instructor, VUMC Nashville, TN
09/2010 - 09/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instruc, VUMC Nashville, TN
10/2010 - 2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN, 10/5/2010
10/2010 - 2010	Resident Rotation Lecture: Congenital Cardiac Surgery (2), Instructor, VUMC Nashville, TN, 10/28/2010
11/2010 - 11/2010	Critical Care Fellows□ Lecture Series: Fellowship Program TEE Conference, Moderator: Cardiothoracic Anesthesia Fellowship Lecture Series, VUMC Nashville, TN
12/2010 - 12/2010	Resident Rotation Lecture: Congenital Cardiac Surgery, Instructor, VUMC Nashville, TN
12/2010 - 12/2010	Critical Care Fellows□ Lecture Series: Embryological Development of Cardiothoracic Structures, Moderator: Cardiothoracic Anesthesia Fellowship Lecture Series, VUMC Nashville, TN
12/2010 - 12/2010	Cardiothoracic anesthesia fellow lecture: Fellowship Program TEE Conference, Moderator: Cardiothoracic Anesthesia Fellowship Lecture Series, VUMC Nashville, TN
01/2011 - 02/2011	Anesthesia for Congenital Heart Disease, Moderator/Instructor, MCE NT
03/2011 - 03/2011	Fellowship Program TEE Conference, Moderator/Instructor, Vanderbilt University Medical Center
04/2011 - 05/2011	Cardiac Physiology, Moderator/instructor
04/2011 - 06/2011	Pulmonary Hypertension: Anesthetic Implications, Moderator/instructor
05/2011 - 06/2011	Fontan Physiology: Anesthetic Implications, Moderator/Instructor
07/2011 - 06/2012	Adults with CHD, 5160 MCE NT, Monthly lecture series for CT anesthesia residents and fellows.
04/2012 - 04/2012	Management of patients with Fontan physiology, 5160 MCE NT
07/2012 - 06/2013	Anesthesiology for Adults with Congenital Heart Disease, Moderator/Instructor
09/2012 - 09/2012	Communication Skills Sessions, moderator/instructor, CELA, Moderating first-year medical students during an H&P in the simulation laboratory.
10/2012 - 11/2012	Fourth Year Special Study: SpecStud:Anesthes Res: ANES-6150 (501-6150-11), PI, instructor, VUMC
11/2012 - 12/2012	Fourth Year Special Study: SpecStud:Anesthes Res: ANES-6150 (501-6150-12), PI, instructor, VUMC
06/2013 - 08/2014	Undergraduate Summer Research Research supervision

## Research Supervision / Mentorship

07/2008 - 06/2011	Amanda Lorinc, M.D. Vanderbilt University, Current Position: Chief Resident. (Resident, General Mentorship)
07/2009 - Present	John Hairr, M.D. Vanderbilt University. (Resident, Research)
01/2011 - Present	Kyle Hocking, B.M.E. Vanderbilt University, Current Position: Masters student, BME. (Graduate Student, Research)
03/2011 - 10/2011	Justin Wright, M.D. Vanderbilt University. (Resident, Research)
04/2011 - Present	Amy Robertson, M.D. Vanderbilt University/Nashville VA Hospital, Current Position: Assistant Professor Anesthesiology. (Faculty, Research)
10/2011 - Present	Jeremy Bennett, M.D. Vanderbilt University, Current Position: Anesthesiology Resident. (Resident, Research)
10/2011 - Present	Bret Alvis, M.D. Vanderbilt University, Current Position: Anesthesiology Critical Care Fellow. (Resident, Research)
02/2012 - Present	Jonathan Whitfield, M.E. Vanderbilt University, Current Position: Masters student BME. (Graduate Student, Research)
12/2012 - 06/2013	Devin Patel Vanderbilt University, Current Position: Medical student research rotation. (Medical Student, Research)
06/2013 - 08/2013	Daniel Feldman, Bachelor in Medicine VUMC, Current Position: Medical student, 4th year. (Medical Student, Research)
12/2013 - Present	Ban Sileshi VUMC, Current Position: Cardiothoracic Anesthesiology Fellow. (Resident, Research)

## Other Significant Activities

04/2011	Shoot for the heart: Fundraiser for Vanderbilt Heart and Vascular Institute; Sporting clays shotgun competition
08/2012	Chief Medical Officer (CMO) Vitalnx, CORP:
01/2013	InvisionHeart, CORP--cofounder and CMO:

## Grants and Funding

Grant number unavailable	Jesse Ehrenfeld (PI)	N/A
Stemmler		
1112-024: An Objective and Novel Approach to Resident Competency Measurement: Utilizing Data from Anesthesia Information Management Systems for Continuous Evaluation and Feedback		
Role: Co-Investigator		
Grant number unavailable	Joyce Cheung-Flynn (PI)	N/A
American Heart Assoc.		
Methods to improve vein graft patency		
Role: Co-Investigator		
Grant number unavailable	S. Eagle (PI)	N/A
DOD		
Development of a non-invasive point-of-care device for managing acute hemorrhage and predicting hemodynamic collapse in the combat casualty patient		
Role: Principal Investigator		
Grant number unavailable	Josh Nickols (PI)	N/A
DOD: SBIR (pending decision)		
Wireless EKG Device to Improve Cardiac Disease Treatment in Rural Settings		
Role: Co-Investigator		
Grant number unavailable	Susan Eagle (PI)	N/A
PHS 2013-2 Omnibus Solicitation: ACF for SBIR/STTR Grant Applications and SF 424 (R&R) Application Guide for		

SBIR/STTR  
Smart IV  
Role: Principal Investigator

10CRP2550035 Eagle, S. (PI) 01/2010 - 12/2011  
American Heart Association  
Modifying cardiac surgical practice to improve aortocoronary vein graft patency.  
Role: Principal Investigator  
Total Cost: \$110,000.00

Grant number unavailable S. Eagle (PI) 04/2012 - 04/2013  
VHVI donor  
Device and mobile application for transmitting pre-hospital electrocardiograms.  
External funding for prototype development of mobile electrocardiogram device and application.  
Role: Principal Investigator  
Total Cost: \$9,000.00

Grant number unavailable 01/2013 - 01/2013  
National Collegiate Inventors and Innovators Alliances (NCIIA)  
Smart IV  
Phase I national competition-winner.  
Role: Co-Principal Investigator  
Total Cost: \$5,000.00

Grant number unavailable 02/2013 - 02/2014  
Sohr Business Competition  
Sohr Business Competition: Smart IV  
Role: Co-Principal Investigator  
Total Cost: \$25,000.00

Grant number unavailable Susan Eagle, MD (PI) 03/2013 - 05/2013  
National Collegiate Inventors and Innovators Alliances (NCIIA),  
'Smart IV', non-invasive hemodynamic monitor  
Role: Co-Principal Investigator  
Total Cost: \$25,000.00

Grant number unavailable Josh Nickols PhD, Susan Eagle, MD (PI) 06/2013 - 08/2013  
JSF  
Jumpstart Foundry Fund  
InvisionHeart, Corp selected and funded by JSF start-up business program.  
Role: Co-Principal Investigator  
Total Cost: \$15,000.00

Grant number unavailable Susan Eagle MD, Franz Baudenbacher PhD (PI) 07/2013 - 08/2013  
VICTR  
Technology Maturation Fund  
Role: Co-Principal Investigator  
Total Cost: \$10,000.00

Grant number unavailable Susan Eagle (PI) 01/2014 - 08/2014  
Novel Device for Non-invasive Continuous Cardiac Output Measurements  
Design and perform clinical trail using a non-invasive cardiac output monitor designed by Cardiac Profiles, INC.

Role: Principal Investigator

Total Cost: \$60,000.00

Grant number unavailable

02/2014 - Present

Fluidnet Corporation

Measurement of the Pressures at Which Intravenous Fluids are Electromechanically Infused

Role: Principal Investigator

Total Cost: \$20,500.00

## Honors / Awards

1991	Honors Program Academic Scholarship, University of Georgia, Recipient 1991 - 1994
1991	Robert Woods Community Scholarship, University of Georgia
1994	Magna cum laude, Depts. of Microbiology and Biochemistry, University of Georgia
1995	Basic Scientist Research Scholarship, Medical College of Georgia
1995	Basic Science Research Fellowship, Woods Hole Laboratory, Cape Cod, MA
2003	Robert B. Dripps Award for Outstanding Graduating Anesthesiology Resident, Medical College of Georgia
2007	Academic Achievement Award., Vanderbilt University, Dept. of Anesthesiology
2008	Academic Achievement Award, Vanderbilt University, Dept. of Anesthesiology
2009	Academic Achievement Award, Vanderbilt Department of Anesthesiology
2010	Academic Achievement Award - Chair award, VUMC Dept of Anesthesiology
2011	Academic Achievement Award-Chair Award, VUMC Dept of Anesthesiology
2012	Academic Achievement Award-Chair Award, VUMC Dept of Anesthesiology
02/2012	Ideas to Innovation (I2I) Competition--winner, VHVI, \$9000.00 award for most innovative project/device related to cardiovascular disease.
03/2012	Tech Venture Challenge, Owen School of Business, Awarded to best business plan for innovative medical device. Judged by panel of venture capitalists in Tennessee.
01/2013	National Collegiate Inventors and Innovators Alliances (NCIIA), NCIIA, \$25000 award for 'Smart IV', non-invasive hemodynamic monitor
02/2013	Sohr Business Competition--1st place, Owen School of Business, \$25,000 for 'Vitalnx: Smart IV technology'
03/2013	Tech Venture Challenge--1st place, Owen School of Business/ CTTC
06/2013	JumpStart Foundry, JSF, Nashville, One of 10 start-up businesses in Nashville selected for a 14-week program and awarded \$15,000 in capital.

## Patents & Copyrights

12/2010	Improved methods and compositions for vein harvest and autografting.. C Brophy, S Eagle, P Komalavilas, K Hocking, J Cheung-Flynn. Patent 12/2010. (Pending; VU09143/VBT:164USP1)
06/01/2011	Intravenous line organizer. S Eagle. U.S. Provisional Patent Application No. 61/491,831 entitled □ IV TABLE AND MAT ORGANIZER AND APPLICATIONS OF SAME□ Vanderbilt Ref. No.: VU1181P1 Our Ref. No. 14506-79664. (Provisional Patent Application #61/491,831) (Pending)
07/15/2011	□ System and Methods of Utilizing Peripheral Venous Pressure and Applications of Same□ . S Eagle, K Sexton, C Brophy, K Hocking. Peripheral venous pressure monitor. (61/508,523)
08/04/2011	Methods and Compositions for Vein Harvest and Autografting. Colleen M. Brophy, Padmini Komalavilas, Joyce Cheung-Flynn, Kyle M. Hocking, Susan S. Eagle. Vein harvest kit for reducing injury to saphenous vein grafts used for aortocoronary bypass or other procedures.. (US 2011/0190572 A1)
07/12/2012	Airway device with incorporated exchange mechanism and applications of the same. Eagle S., Alvis B. (US61/670,945)
07/13/2012	Apparatus and methods for measuring peripheral venous pressure and applications of the same. Eagle S, Sexton K, Hocking K, Brophy C. Non-invasive device and algorithm for peripheral venous pressure monitoring. (PCT/US12/46670)
09/10/2012	Intravenous access device with integrated hemodynamic resuscitation. Eagle S, Sexton K,

01/2013	Boyer R, Hocking K, Brophy C, Baudenbacher F. (61/698,790) Systems and Methods for Mobile Electrocardiogram. Susan Eagle MD, Franz Baudenbacher PhD, Rene Harder PhD, Jon Whitfield MS.BME. (Pending)
07/10/2013	Airway Device with Incorporated Exchange Mechanism and Applications of the Same. Susan Eagle MD, Bret Alvis MD. (Provisional #61844704) (Pending)

## Publications

### Peer Reviewed Publications

#### Research Articles

1. Lim R, Furukawa R, **Eagle S**, Cartwright R, Fechtmeier M. Three Distinct F actin Binding Sites in the Dictyostelium discoideum 34,000 dalton Actin Bundling Protein. Biochemistry 1999 Jan;38(2):800-812. PMID: 9888821.
2. Lyew MA, Mondy C, **Eagle SS**, Chernich SE. Hemodynamic Instability and Delayed Emergence from General Anesthesia Associated with Inadvertent Intrathecal Baclofen Overdose. Anesthesiology 2003 Jan;98(1):265-268. PMID: 12503007.
3. Lyew MA, Mondy C, **Eagle S**, Chernich SE. Baclofen, Hemodynamic Instability and Delayed Emergence, Our Perspective: In Reply. . Anesthesiology 2003 Sep;99(3):758-759.
4. Greelish JP, **Eagle SS**, Zhao DX, Deegan RJ, Crenshaw MH, Balaguer JM, Ahmad RM, Byrne JG. Management of new-onset mitral regurgitation with intraoperative angiography and intraoperative percutaneous coronary intervention. J. Thorac. Cardiovasc. Surg. 2006 Jan;131(1):239-240. PMID: 16399324.
5. Webb DP, Warhooover MT, **Eagle S**, Greelish JP, Zhao D, Byrne JG. Argatroban in Short Term Percutaneous Ventricular Assist Due to Heparin Induced Thrombocytopenia. The Journal of ExtraCorporeal Technology 2008 Jun;40(2):130-134. PMID: 18705550.
6. Zhao D, Leacche M, Balaguer JM, Boudoulas KD, Damp JA, Greelish JP, Byrne JG, Ahmad RM, Ball SK, Cleator JH, Deegan RJ, **Eagle SS**, Fong PP, Fredi JL, Hoff SJ, Jennings HS 3rd, McPherson JA, Piana RN, Pretorius M, Robbins MA, Slosky DA, Thompson A. Routine intraoperative completion angiography after coronary artery bypass grafting and 1-stop hybrid Revascularization results from a fully integrated hybrid catheterization laboratory/operating room. . J. Am. Coll. Cardiology 2009 Jan;53(3):232-241. PMID: 19147039.
7. Umakanthan R, Petracek M, Leacche M, Solenkova N, **Eagle S**, Ahmad R, Greelish J, Ball S, Hoff S, Absi T, Balaguer J, Byrne J. Minimally Invasive Right Thoracotomy without Aortic Cross-Clamping: A Powerful Tool for Re-Operative Mitral Valve Surgery. . Journal of Heart Valve Disease 2010 Mar;19(2):236-243.
8. Subhasis C, **Eagle S**, Adler D, Byrne J. Incidental Discovery of an Ascending Aortic Thrombus. Journal of Thoracic and Cardiovascular Surgery 2010 Jul;140(1):e-14-16. PMID: 19691995.
9. **Eagle S**, Thompson A, Fong P, Pretorius M, Deegan R, Hairr J, Riedel B. Takotsubo Cardiomyopathy and Coronary Vasospasm During Orthotopic Liver Transplantation: Separate Entities or Common Mechanism?. J of Cardiothorac and Vasc Anesth 2010 Aug;24(4):629-632. PMID: 19864162.
10. Levin R, Leacche M, Petracek M, Solenkova N, Umakanthan R, Kumar S, Brewer Z, Deegan R, **Eagle S**, Thompson A, Byrne J. Extending the Use of the Pacing Swan-Ganz for Safe Minimally Invasive Cardiac Surgery. J Cardiothorac Vasc Anesth. 2010 Aug;24(4):568-573.
11. Hocking K, Brophy C, Rizvi S, Komalavilas P, **Eagle S**, Leacche M, Balaguer J, Cheung-Flynn J. Detrimental Effects Of Mechanical Stretch On Smooth Muscle Function In Saphenous Veins. . Journal of Vascular Surgery 2011 Feb;53(2):454-460. PMID: 21146345.
12. **Eagle S**, Daves, S. The adult Fontan physiology: Systematic approach to perioperative management for non-cardiac surgery. J Cardiothorac Vasc Anesth 2011 Apr;25(2):320-334. PMID: 21477759.
13. Greelish JP, Leacche M, Solenkova N, Eagle. S, et al. Improved mid-term outcomes for "Type A"(central) pulmonary emboli treated surgically. J Thorac Cardiovasc Surg 2011 Apr;In Press(Epub ahead of print):Epub ahead of print. PMID: 21481423.
14. **Eagle S**, Brophy CM, Komalavilas P, Hocking K, Putumbaka G, Osgood M, Sexton K, Leacche M, Cheung-Flynn J. Surgical skin markers impair human saphenous vein graft smooth muscle and endothelial function. The American surgeon 2011 Jul;77(7):922-8. PMID: 21944360.
15. Fandong Li, Colleen Brophy, Susan Eagle, Michael Osgood, Padmini Komalavilas, Joyce Cheung-Flynn. Pressure control during preparation of saphenous veins prevents endothelial injury and reduces neointima formation. Jama Surgery--in press 2013.
16. Li FD, Sexton KW, Hocking KM, Osgood MJ, **Eagle S**, Cheung-Flynn J, Brophy CM, Komalavilas P. Intimal thickness associated with endothelial dysfunction in human vein grafts. The Journal of surgical research 2013 Mar;180(1):e55-62. PMID: 22763213 PMCID: PMC3515722.
17. Robertson AC, **Eagle SS**. Transesophageal Echocardiography During Orthotopic Liver Transplantation: Maximizing Information Without the Distraction. Journal of cardiothoracic and vascular anesthesia 2013 Apr;



PMID: 23642888.

18. Bennett J, Markham L, Ehrenfeld J, **Eagle S**. Anesthetic management and outcomes for patients with pulmonary hypertension and intracardiac shunts and Eisenmenger syndrome: a review of institutional experience. Journal of Clinical Anesthesia 2014 Jun.
19. Li F, Osgood M, **Eagle S**, Brophy C, Cheung-Flynn J. PRESSURE CONTROL DURING PREPARATION OF SAPHENOUS VEINS PREVENTS ENDOTHELIAL INJURY AND REDUCES NEOINTIMA FORMATION. JAMA Surgery 2014 Jun.

### Abstracts

1. Sexton KW, Hocking KM, Osgood MJ, Komalavilas P, Cheung-Flynn J, **Eagle S**, Leacche M, Brophy C. Basal Intimal Thickness Predicts Endothelial Function in Human Saphenous Vein. J Surg Res 2011 Feb;165(2):343.

## Non-Peer Reviewed Publications

### Abstracts

1. Bennett J, **Eagle S**. Ventricular septal defect following septal myomectomy in a patient with hypertrophic cardiomyopathy.

### Evidence-Based Guidelines

1. **Eagle S**. CEBA Guidelines: Perioperative Fluid Management. 2013 Jan.

### Book Chapters

1. Bowe EA, Carroll IR, Desai SP, Dolinski SY, **Eagle S**, Fragneto RY, Hatton KW, Herrera E, Jameson L, Keegan MT, Mackey SC, Thomas JA, Young DA. Anesthesiology Continuing Education. Issue 6A. Anesthesiology Continuing Education. 2009 May.
2. Bowe EA, Carroll IR, Desai SP, Dolinski SY, **Eagle S**, Fragneto RY, Hatton KW, Herrera E, Jameson L, Keegan MT, Mackey SC, Thomas JA, Young DA. Anesthesiology Continuing Education. Issue 6B. Anesthesiology Continuing Education. 2009 Sep;6B.
3. Bowe EA, Carroll IR, Desai SP, Dolinski SY, **Eagle S**, Fragneto RY, Hatton KW, Herrera E, Jameson L, Keegan MT, Mackey SC, Thomas JA, Young DA. Anesthesiology Continuing Education. Issue 7A. Anesthesiology Continuing Education.. 2010 May;7A.
4. Bowe EA, Carroll IR, Desai SP, Dolinski SY, **Eagle S**, Fragneto RY, Hatton KW, Herrera E, Jameson L, Keegan MT, Mackey SC, Thomas JA, Young DA. Anesthesiology Continuing Education. Issue 7B. Anesthesiology Continuing Education. 2010 Oct;7B.
5. Bowe EA, Carroll IR, Desai SP, Dolinski SY, **Eagle S**, Fragneto RY, Hatton KW, Herrera E, Jameson L, Keegan MT, Mackey SC, Thomas JA, Young DA. Anesthesiology Continuing Education. Issue 8A. Anesthesiology Continuing Education. 2011 Apr.
6. Bowe EA, Carroll IR, Desai SP, Dolinski SY, **Eagle S**, Fragneto RY, Hatton KW, Herrera E, Jameson L, Keegan MT, Mackey SC, Thomas JA, Young DA. Anesthesiology Continuing Education 8B. 2011 Oct.
7. Bowe EA, Carroll IR, Desai SP, Dolinski SY, **Eagle S**, Fragneto RY, Hatton KW, Herrera E, Jameson L, Keegan MT, Mackey SC, Thomas JA, Young DA. Anesthesiology Continuing Education 9A. 2012 Jun.
8. Bowe EA, **Eagle S**, Carroll I, Keegan M, Loyd G, Jameson L, Johnson J, Hatton K, Lu Jeffrey, Lace C, Thomas J. Anesthesiology Continuing Education, American Society of Anesthesiology. Issue 9B. 2012 Oct.
9. Chaudhuri K, **Eagle S**, Hah J, Johnson J, Jones S, Keegan M, Lace C, Lu J, Thomas J, Young D, Bowe E. Anesthesiology Continuing Education, American Society of Anesthesiology. Issue 10A. 2013 Jan.
10. **Eagle S**, Thompson A. Congenital Heart Disease in the Adult Presenting for Non-Cardiac Surgery. ASA Refresher Courses in Anesthesiology. Editors: M. Hagarstown, Maryland, United States: Lippincott Williams & Wilkins; 2013 Feb;40.

## Presentations

### Internal Grand Rounds

1. Eagle, S.. Morbidity and Mortality Grand Rounds.. Vanderbilt University.; Nashville, Tennessee. 2007 May; Anesthetic Management of Cardiac Tamponade..
2. Anesthesiology Grand Rounds. Nashville, Tennessee. 2011 Dec; Management of Congenital Heart Disease in the Adult Presenting for Non-Cardiac Surgery..

### Presentations at Scientific Meetings

1. Lim R, Furukawa R, Eagle S, Fechheimer M. Society for Cellular Biology Meeting. Society for Cellular Biology; Washington, Dist. Of Col.. 1999 Oct; Abstract: Mapping of Distinct F- Actin Binding Sites in the Dictyostelium discoideum 34 kD Protein..
2. Eagle S, Algren J, Foster J. Society for Education in Anesthesia Spring Meeting. Society for Education in Anesthesia; Santa Fe, New Mexico. 2007 May; Abstract: Utility of Cardiac Anesthesia Rotation Examinations..
3. Algren J, Eagle S, Easdown J. Society for Education in Anesthesia Spring Meeting. Society for Education in Anesthesia; Santa Fe, New Mexico. 2007 May; Abstract: Resident Mentorship.
4. Eagle, S.. World Congress of Cardiology Meeting. World Congress of Cardiology; Buenos Aires, Argentina. 2008 May; Minimally Invasive Mitral Valve Surgery Without Aortic Crossclamping: An Alternative for Reoperative Cardiac Surgery..
5. Eagle, S.. 9th Annual Tennessee Perfusion Association Regional Meeting.. Tennessee Perfusion Association / Baptist Hospital; Nashville, Tennessee. 2008 Sep; Cerebral Oximetry and the New Society of Thoracic Surgeons Parameters.
6. Eagle, S.. 10th Annual Perfusionst Association Meeting. Baptist Hospital; Nashville, Tennessee. 2009 Sep; Assessment of the Mitral Valve Using Two and Three Dimensional Echocardiography: Transesophageal Echocardiography..
7. Eagle, S.. Transesophageal Echocardiography Symposium. Vanderbilt University, Cardiothoracic Anesthesiology; Nashville, Tennessee. 2009 Sep; Transesophageal Echocardiography and Hemodynamic Calculations..
8. Eagle, S.. 2nd Annual Valve Symposium. VHVI; Nashville, Tennessee. 2009 Oct; Hemolytic anemia following mitral valve repair.
9. Rizvi S, Hocking K, Komalavilas P, Cheung-Flynn J, Eagle S, Leacche M, Brophy C.. Vanderbilt University Surgical Research poster presentation.. Vanderbilt University; Nashville, Tennessee. 2010 Apr; Surgical Skin Markers Reduce Human Saphenous Vein Graft Function and Viability..
10. Eagle, S.. Transesophageal Echocardiography Symposium. Vanderbilt University, Cardiothoracic Anesthesiology; Nashville, Tennessee. 2010 May; Transesophageal Echocardiography and Hemodynamic Calculations..
11. Eagle, S.. American Society of Anesthesiologists Annual Meeting. American Society of Anesthesiologists; San Diego, California. 2010 Oct; Congenital Heart Disease in the Adult Presenting for Non-Cardiac Surgery. Refresher Course Lecture.
12. Osgood M, Hocking K, Sexton K, Komalavilas P, Cheung-Flynn J, Eagle S, Leacche M, Brophy C.. Southeastern Surgical Conference. Chattanooga, Tennessee. 2011 Feb; Surgical Skin Markers Reduce Human Saphenous Vein Graft Functional Viability.
13. Sexton KW, Hocking KM, Osgood MJ, Komalavilas P, Cheung-Flynn J, Eagle S, Leacche M, Brophy C.. 6th Annual Surgical Congress. Association for Academic Surgery; Huntington Beach, California. 2011 Feb; Abstract: Basal Intimal Thickness Predicts Endothelial Function in Human Saphenous Vein..
14. Osgood M, Hocking K, Sexton K, Cheung-Flynn J, Komalavilas P, Leacche M, Eagle S, Brophy C.. Arteriosclerosis Thrombosis and Vascular Biology Scientific Sessions.. Chicago, Illinois. 2011 Apr; Abstract: □ Back-table□ manipulation of human saphenous vein significantly impairs endothelial and smooth muscle function..
15. Ehrenfeld J, Higgins M, Hersey S, Eagle S, Sandberg W. International Anesthesia Research Society. Vancouver, Canada. International Anesthesia Research Society.; Vancouver, British Columbia, Canada. 2011 May; Abstract: Pilot Implementation & Assessment of a Computerized Preanesthetic Assessment Tool..
16. National Collegiate Inventors and Innovators Alliance 16th annual meeting. National Collegiate Inventors and Innovators Alliance; Boston, Massachusetts. 2012 Dec 28; Smart IV technology.
17. Bennett J, Ehrenfeld J, Ahmad R, Eagle S. Association of University Anesthesiologists 60th Annual Meeting. Association of University Anesthesiologists; Miami, Florida. 2013 Apr 5; Hemodynamic instability following pericardiectomy in patients with acute pulmonary embolism: an institutional review.
18. Bennett J, Eagle S. Society of Cardiovascular Anesthesia. Society of Cardiovascular Anesthesia; Miami, Florida. 2013 Apr 6; Iatrogenic Ventricular Septal Defect During Septal Myomectomy: Intraoperative Medical Management Using Shunt Fraction..

#### **Invited Presentation - Local**

1. Eagle, S.. CRNA lecture series. Vanderbilt University; Nashville, Tennessee. 2011 Jan; Perioperative Implications of adults with Congenital Heart Disease.
2. Tech Venture Challenge. Owen School of Business; Nashville, Tennessee. 2012 Feb; Introduction to Point of care Peripheral intravenous Monitoring Device.
3. S. Eagle. Mountain Capital Group, Joe Cook; Nashville, Tennessee. 2012 Apr 16; Peripheral IV monitoring device.
4. S. Eagle. Device Innovations Group; Nashville, Tennessee. 2012 May 16; C-IV technology: Utility and market analysis.
5. Tech Venture Challenge. Owen Business School, Vanderbilt University; Nashville, Tennessee. 2013 Apr; Novel

device for remote electrocardiogram monitoring and transmission.

### **Invited Presentation - Regional**

1. Eagle, S.. Saving Little Hearts Regional Congenital Symposium.. Vanderbilt Children's Hospital; Nashville, Tennessee. 2007 Jun; Intraoperative Management of Patients with Complex Congenital Heart Disease..
2. Eagle, S.. 11th Annual Perfusionist Association Meeting. Centennial Hospital; Nashville, Tennessee. 2010 Oct; Cardiac Surgery in the Adult with Congenital Heart Disease..
3. Susan Eagle, MD. Anesthesiology Technologists Regional Meeting. Vanderbilt University; Nashville, Tennessee. 2011 Jun 4; Implications of adults with congenital heart disease.
4. VHVI Cardiology Conference (televised to satellite cardiology clinics). Vanderbilt Cardiology; Nashville, Tennessee. 2012 Feb; TEE / perioperative care of adults with Congenital Heart Disease.
5. S. Eagle. Tech Venture Challenge Competition. Entrepreneur Center; Nashville, Tennessee. 2012 Mar; C-IV technology.
6. Sohr Business Competition. Owen School of Business; Nashville, Tennessee. 2013 Jan 8; Smart IV: Medical implications and business plan.
7. Josh Nickols PhD, Susan Eagle MD, Franz Baudenbacher PhD. 2013 Investor Day. Jumpstart Foundry; Nashville, Tennessee. 2013 Aug 22; InvisionHeart: Business Pitch.

### **Invited Presentation - National**

1. Eagle, S.. American Society of Anesthesiology Annual Meeting. American Society of Anesthesiology; San Diego, California. 2010 Oct; Congenital Heart Disease in the Adult Presenting for Non-Cardiac Surgery. Refresher Course Lecture..
2. Eagle S, Osgood M, Hocking K, Sexton K, Komalavilas P, Cheung-Flynn J, Brophy C.. Arteriosclerosis, Thrombosis, and Vascular Biology.. Chicago, Illinois. 2011 Apr; Preservation of Endothelial Function and Prevention Of Intimal Hyperplasia In Porcine Saphenous Vein with a Pressure-Release Valve..
3. American Society of Anesthesiology Annual Meeting. American Society of Anesthesiology; Chicago, Illinois. 2011 Oct; Congenital Heart Disease in the Adult Presenting for Non-Cardiac Surgery..
4. Susan Eagle MD. American Society of Anesthesiology. San Francisco, California. 2013 Oct 16; Congenital Heart Disease in the Adult Population: Considerations for Non-cardiac Surgery.

### **Invited Presentation - International**

1. Eagle, S.. Swiss Medical Hospital; Buenos Aires, Argentina. 2008 May; Minimally Invasive Mitral Valve Procedures Utilizing Fibrillatory Arrest Without Aortic Crossclamping..

### **External Grand Rounds**

1. Eagle, S.. Grand Rounds. Wake Forest University; Winston-Salem, North Carolina. 2010 Jan 19; Perioperative management of adults with congenital heart disease presenting for non-cardiac surgery..

### **Medically Challenging Cases**

1. Lane J, Lonergan D, Eagle S.. American Society of Anesthesiology Annual Meeting.. American Society of Anesthesiology; New Orleans, Louisiana. 2009 Oct; Abstract: Hemolytic Anemia Following Mitral Valve Repair. Medically Challenging Case.
2. Chang J, Thompson A, Riedel B, Hairr J, Eagle S. American Society of Anesthesiology Annual Meeting.. American Society of Anesthesiology; New Orleans, Louisiana. 2009 Oct; Abstract: Diagnosis and Management of Takotsubo Cardiomyopathy during Orthotopic Liver Transplantation. Medically Challenging Case..
3. Sandall J, Downing J, Eagle S.. American Society of Anesthesiology Annual Meeting. American Society of Anesthesiology; San Diego, California. 2010 Oct; Management of Rheumatic Mitral Valve Stenosis in the Parturient. Medically Challenging Case Abstract..
4. Perkeson J, Eagle S. American Society of Anesthesiology Annual Meeting. ASA; Chicago, Illinois. 2011 Oct; Postoperative Myocardial Ischemia Secondary to Severe Coronary Vasospasm - The Case of the Misguided Chest Tube.
5. J Wright, Eagle S. American Society of Anesthesiology Annual Meeting. ASA; Chicago, Illinois. 2011 Oct; Management of Catheter-Induced Pulmonary Artery Rupture During Emergent Pulmonary Embolectomy..
6. Amanda Hester MD, Susan Eagle MD. American Society of Anesthesiology Annual Meeting. American Society of Anesthesiology; San Francisco, California. 2013 Oct 14; Anesthetic considerations for an adult undergoing Fontan revision and right atrial reduction in a patient with congenital tricuspid atresia.

### **Visiting Professor**

1. Eagle, S.. Cardiothoracic Research Conference. Duke University; Durham, North Carolina. 2010 May 4; Improving aortocoronary saphenous vein graft patency.

**Panel Presentation**

1. American Society of Anesthesiology Annual Meeting. American Society of Anesthesiology; Chicago, Illinois. 2011 Oct; How the normal physiologic changes of pregnancy impact the patient with acquired or congenital heart disease.
2. Eagle S. Society of Cardiovascular Anesthesiologists 35th Annual Meeting and Workshops. Society of Cardiovascular Anesthesiologists; Miami, Florida. 2013 Apr 6; Panel Presentation: Extracorporeal Membrane Oxygenation.

**Workshop**

1. Eagle S, Sexton K. New Ventures Technology Showcase. Mountain Group Capital; Nashville, Tennessee. 2013 Feb 11; Smart IV technology.

**University Talk**

1. Susan Eagle, MD, Michael Pilla, MD. Multidisciplinary M&M. Nashville, Tennessee. 2013 Mar 1; Perioperative management of patients with coronary stents.