

CURRICULUM VITAE
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Current Military Service: Commander, U.S. Navy Medical Corps (Reserve Officer)
Veteran Status: Combat Veteran, Operation Enduring Freedom
Combat Veteran, Resolute Support Mission

Education:

1992-1996 Phillips Academy Andover, Andover, MA
1996-2000 B.S., Haverford College, Haverford, Pennsylvania
2000-2004 M.D., University of Chicago - Pritzker School of Medicine, Chicago, Illinois
2008 Summer Program in Clinical Effectiveness, Harvard University School of Public Health, Boston, Massachusetts
2008-2009 Masters of Public Health, Harvard University School of Public Health, Boston, Massachusetts

Postdoctoral Training:

6/2004 – 6/2005 Internship in Medicine, Department of Medicine, Massachusetts General Hospital, Boston, Massachusetts
6/2005 – 8/2005 Research Fellowship in Anesthesia, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts
8/2005 – 8/2008 Resident in Anesthesiology, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts
8/2008 – 8/2010 Research Fellowship in Anesthesia Informatics, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Medical Licensure and Certification:

2003 Emergency Medical Technician License (License #131262)
2004 Advanced Cardiac Life Support
2007 Neonatal Resuscitation Program
2008 Full Medical License, Commonwealth of Massachusetts (License #235285)
2008 Full Medical License, State of Delaware (License # C1-0008697)
2008 Federal DEA Registration
2008 Full Medical License, United States Navy Medicine Support Command
2009 Board Certification in Anesthesiology, American Board of Anesthesiology (Certificate #44560)

2010 Full Medical License, State of Tennessee (License #46274)
 2013 Pediatric Advanced Life Support
 2013 Board Certification in Clinical Informatics, American Board of Preventive Medicine
 (Certificate #70251)
 2013 Advanced Trauma Life Support

Academic Appointments:

Instructor in Anesthesia, Department of Anesthesia, Critical Care and Pain Medicine, Harvard Medical School, 2008
 Assistant Professor, Department of Anesthesia, Critical Care and Pain Medicine, Harvard Medical School, 2010
 Assistant Professor, Department of Anesthesiology, Vanderbilt University Medical School, 2010-2012
 Assistant Professor, Department of Biomedical Informatics, Vanderbilt University Medical School, 2010-2012
 Visiting Researcher, Norwegian University of Science and Technology, Trondheim, Norway, 2011
 Faculty, The Public Squared, Public Policy Strategy Institute, Washington, DC, 2011 - present
 Associate Professor, Department of Anesthesiology, Vanderbilt University Medical School, 2012-2017
 Associate Professor, Department of Surgery, Vanderbilt University Medical School, 2012-2017
 Associate Professor, Department of Biomedical Informatics, Vanderbilt University Medical School, 2012-2017
 Associate Professor, Department of Health Policy, Vanderbilt University Medical School, 2014-2017
 Adjunct Professor, Department of Surgery, Uniformed Services University, 2015-present
 Professor, Department of Anesthesiology, Vanderbilt University Medical School, 2017-present
 Professor, Department of Surgery, Vanderbilt University Medical School, 2017- present
 Professor, Department of Biomedical Informatics, Vanderbilt University Medical School, 2017- present
 Professor, Department of Health Policy, Vanderbilt University Medical School, 2017- present
 Joseph A. Johnson, Jr., Distinguished Leadership Professor, 2018 - present

Hospital Appointments:

Assistant in Anesthesia, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, 2008-2010
 Assistant Anesthetist, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, 2010
 Staff Anesthesiologist, Vanderbilt University Medical Center, Nashville, Tennessee, 2010-present
 Staff Anesthesiologist, NATO Role III Multinational Medical Unit, Kandahar, Afghanistan, 2014-2015

Major Educational Leadership Positions:

2008-2010	Institutional Site Mentor, Albert Schweitzer Fellowship Program	Massachusetts General Hospital
2009-2010	Director, Anesthesia Informatics Fellowship	Massachusetts General Hospital
2010-present	Faculty Affiliate Advisor	Vanderbilt University School of Medicine - Gabbe College
2010-present	Director, Monthly Anesthesia Informatics Seminar	Vanderbilt University Medical Center
2011-present	Director, Monthly Anesthesia Informatics Journal Club	Vanderbilt University Medical Center
2012-present	Course Co-Director, Foundations of Healthcare Delivery	Vanderbilt University School of Medicine

2012-present	Course Director, “Sex, Sexuality, and Sexual Health”	Vanderbilt University School of Medicine
2013-present	Director, Graduate Certificate in LGBTI Health	Vanderbilt University School of Medicine
2015-present	Director, Professional Development Rotation	Vanderbilt University Department of Anesthesiology
2016-present	Director, Education Research	Vanderbilt University School of Medicine

Major Administrative Leadership Positions:

2008-2010	Chair, LGBT Employee Resource Group	Massachusetts General Hospital
2009-2010	Director, Anesthesia Clinical Research Center	Massachusetts General Hospital
2010-2014	Director, Center for Evidence-Based Anesthesia	Vanderbilt University Medical Center
2010-2015	Director, Vanderbilt Anesthesiology & Perioperative Informatics Research Division	Vanderbilt University Medical Center
2010-present	Faculty, Vanderbilt Orthopedic Institute Center for Health Policy	Vanderbilt University Medical Center
2011-2014	Medical Director, Perioperative Quality	Vanderbilt University Medical Center
2011-2014	Chair, Perioperative Quality Improvement Committee	Vanderbilt University Medical Center
2011-present	Consultant to the Associate Dean of Diversity on LGBTI issues	Vanderbilt University Medical Center
2011-2012	Administrative Department Head	Operational Health Support Unit Camp Lejune, Detachment J
2012-present	Director, Vanderbilt Program in LGBTI Health	Vanderbilt University Medical Center
2012-2014	Assistant Officer-In-Charge (AOIC)	Operational Health Support Unit Camp Lejune, Detachment J
2014-2015	Chair, Department of Anesthesiology	NATO Role III Multinational Medical Unit, Kandahar Afghanistan
2014-2015	Public Affairs Officer	NATO Role III Multinational Medical Unit, Kandahar Afghanistan
2014-2015	Continuing Medical Education Coordinator	NATO Role III Multinational Medical Unit, Kandahar Afghanistan
2015-present	Associate Director, Vanderbilt Anesthesiology & Perioperative Informatics Research Division	Vanderbilt University Medical Center

Committee Service:

Massachusetts General Hospital

2006	Pediatric Operating Room Performance Improvement Committee
2008-2010	Credentialing Committee, Department of Anesthesia Critical Care and Pain Medicine
2008-2010	Perioperative Positioning Task Force
2008-2010	LGBT Health Week Organizing Committee
2009-2010	AIMS Data Use Committee, Department of Anesthesia Critical Care and Pain Medicine
2010	Anesthesia Executive Committee on Research, Department of Anesthesia Critical Care and Pain Medicine
2010	Committee on Diversity, Department of Anesthesia Critical Care and Pain Medicine
2010	MGH Cross-Cultural Care Committee
2010	MGH Domestic Violence Working Group

Vanderbilt University Medical Center

- 2010-present Quality, Morbidity & Mortality and Practice Improvement Committee, Department of Anesthesiology
- 2010-present Anesthesiology Research Executive Committee, Department of Anesthesiology
- 2011-2015 Physician Council for Clinical Service Excellence, Vanderbilt University Medical Center
- 2011-2012 Discharge Phone Workgroup, Vanderbilt University Medical Center
- 2011-2012 Medical Center Pressure Ulcer Taskforce, Vanderbilt University Medical Center
- 2011-2012 Chair, Data Safety Monitoring Board – Precedex Spine Study
- 2011-present Perioperative Quality Improvement Committee, Vanderbilt University Medical Center
- 2012 Curriculum 2.0 Thread Committee, Vanderbilt University School of Medicine
- 2012-2013 LCME Institutional Self-Study Committee, Teaching & Evaluation Subcommittee, Vanderbilt University School of Medicine
- 2012-present VUMC Committee on LGBT Issues
- 2012-present VUMC Curriculum 2.0 Steering Committee, Vanderbilt University School of Medicine
- 2015-present VUMC Reward, Recognition and Retention Committee
- 2015-2016 Chancellor's Strategy and Planning Committee for Diversity, Inclusion, and Community
- 2016 Vanderbilt University Hoverboard Committee
- 2016-present VUSM Faculty Teaching and Clinical Service Awards Selection Committee
- 2016-present VUSM Learning Environment Assessment & Feedback (LEAF) Committee
- 2016-present VUSM Interview Admissions Committee
- 2016-present Co-Chair, VUMC Diversity and Inclusion Strategy Workgroup
- 2017-present Faculty Senate Standing Committee on Diversity, Equity, and Inclusion

Regional and National

- 2006-2009 Publications Committee, New England Journal of Medicine / Massachusetts Medical Society
- 2008-2013 Board Committee on Quality, Fenway Community Health Center, Boston Massachusetts
- 2008-2013 Board of Trustees, Boston Medical Library, Boston, Massachusetts
- 2009-2014 Board of Visitors, Fenway Community Health Center, Boston, Massachusetts
- 2012-2015 LGBTI Liaison Group, Association of American Medical Colleges
- 2012-present Institute of Medicine, Systems Engineering for Health Innovation Collaborative
- 2015-present Advisory Board Member, Substitutable Medical Applications & Reusable Technology (SMART) Platforms Project
- 2015-present Representative, Physician Consortium for Performance Improvement (PCPI)
- 2015-2017 Co-Director, Navy Surgeon General's Taskforce on Personalized and Digital Medicine
- 2015-2016 Subject Matter Expert, Army Health Medical Work Group
- 2016-2017 Health IT Safety Collaborative: Usability and Medication Management Work Group
- 2016-present Minimizing ICU Neurological Dysfunction with Dexmedetomidine-induced Sleep Data Safety Monitoring Board, Member
- 2017-present Health2047, Board Member

Professional Organizations/Societies:

2000-present	American Medical Association
2001-2002	University of Chicago, <i>President</i>
2001-2004	Medical Student Section, <i>Delegate</i>
2002-present	Anesthesiology Section Council, <i>Member</i>
2002-2003	Medical Student Section Minority Issues Committee, <i>Chair</i>
2002-2003 & 2005-2007	House of Delegates, <i>Alternate Delegate</i>
2003-2004 & 2007-present	House of Delegates, <i>Delegate</i>
2004-2008	Resident and Fellow Section, <i>Delegate</i>
2008-2009	Resident and Fellow Section Governing Council, <i>Member</i>
2008-2009	Annual Research Poster Symposium Committee, <i>Member</i>
2008-2009	Public Health Committee, <i>Member</i>
2009-2014	Specialty and Service Society, Rules Committee, <i>Member</i>
2009-2014	Young Physician Section, <i>Delegate</i>
2011-2014	Young Physician Section Governing Council, <i>Member</i>
2011-present	Introduction to the Practice of Medicine Advisory Panel, <i>Member</i>
2012-2014	Specialty and Service Society, Rules Committee, <i>Chair</i>
2014-present	Board of Trustees, <i>Member</i>
2014-2015	Board Liaison, American Medical Association Political Action Committee (AMPAC)
2014-present	Board Liaison, Minority Affairs Section Governing Council
2014-present	Member, Awards & Nominations Committee
2015-present	Member, LGBTQ Advisory Committee
2001-present	Association of American Medical Colleges
2001-2004	Organization of Student Representatives, <i>Member</i>
2011-present	LGBTI Liaison Group, <i>Member</i>
2012-present	Group on Diversity and Inclusion, <i>Member</i>
2001-present	American Society of Anesthesiologists
2004-2008	Resident Component, <i>Delegate</i>
2005-present	House of Delegates, <i>Delegate</i>
2005-2007	Resident Component Governing Council, <i>Member</i>
2006-present	Standards and Practice Parameters Committee, <i>Member</i>
2008-present	Committee on Young Physicians, <i>Member</i>
2010-2011	Task Force on Guidelines for the Management of Postoperative Nausea and Vomiting, <i>Member</i>
2010-2012	Ad Hoc Committee on Future Land Use, <i>Member</i>
2011-2013	Abstract Review Subcommittee on Outcomes and Database Research, <i>Member</i>
2011-2015	Ad Hoc Committee on Anesthesia Information Management Systems
2012-present	Bylaws Committee, <i>Member</i>
2013-present	Abstract Review Subcommittee on Outcomes and Database Research, <i>Chair</i>
2013-present	Scientific Advisory Committee, <i>Member</i>
2015-present	Committee on the Anesthesia Care Team, <i>Member</i>

2017-present Ad Hoc Committee on Augmenting Resident Education, *Member*

2004-present **Massachusetts Medical Society**

2005-present Committee on Young Physicians, *Member*

2005-2007 Information Technology Committee, *Member*

2005-2008 Resident & Fellow Governing Council, *Member*

2006-2015 Board of Trustees, *Member*

2006-2008 Annual Resident/Student Research Symposium, *Coordinator*

2007-2008 Vital Signs Physician Editorial Board, *Member*

2008-2010 Committee on LGBT Matters, *Chair*

2008-2009 Taskforce on Benevolence, *Member*

2009-2012 Vice Speaker of the Society

2009-2015 Executive Committee, *Member*

2009-2012 Taskforce on House of Delegates Procedures, *Member*

2012-2015 Speaker of the Society

2004-present **Suffolk District Medical Society**

2008-2011 Secretary of the Society

2008-2013 Executive Committee, *Member*

2011-2013 Vice President of the Society

2005-present **Massachusetts Society of Anesthesiologists**

2006-2008 Committee on Resident Affairs, *Chair*

2007 New England Anesthesia Resident Poster Session Committee, *Member*

2008-2012 Public Education Committee, *Member*

2009-2010 Committee on Resident Affairs, *Faculty Advisor*

2010-2011 Vice President

2010-2012 Committee on Bylaws and Rules, *Member*

2011-2012 Governmental Affairs Committee, *Member*

2011-2012 Ad Hoc Committee on Office Based Surgery, *Member*

2005-present **International Anesthesia Research Society**

2005-present Member

2006-present **Society for Ambulatory Anesthesia**

2006-2008 Committee on Resident Section, *Member*

2008-2009 Committee on Resident Section, *Vice-Chair*

2007-2013 **Doctors and Lawyers for Healthcare Reform**

2007-2013 Board of Directors, *Founding Member*

2009-2017 **United States Critical Illness and Injury Trials Group**

2010-present **Society for Technology in Anesthesia**

2011 Chair, Abstract Review Committee

2012 Chair, Annual Scientific Meeting

2012-present **Tennessee Society of Anesthesiologists**

2012-present **Association of University Anesthesiologists**

2013-present **Healthy Tennessee**

2013-present Board of Directors, *Founding Member*

2016-present **West End Synagogue**, Board of Directors

2016-present **Southeast AIDS Education and Training Center**, *Steering Committee Member*

Honors and Prizes:

1999	Advance Placement School with Honors	The College Board	Awarded for extraordinary achievement on the advanced placement examinations
1999	Special Tribute and Commendation	State of Delaware, House of Representatives	Awarded for outstanding service and advocacy to the State of Delaware
1999	Undergraduate Award in Analytical Chemistry	American Chemical Society	Awarded for research accomplishments at the undergraduate level
2000	Department Honors	Haverford College Chemistry Department	Awarded for academic excellence
2000	National Dean's List	Haverford College	Awarded for academic excellence
2000	Phi Beta Kappa	Haverford College	Awarded for academic excellence
2001	Excellence in Clinical Research Award	University of Chicago	Awarded for excellence in clinical research
2002	Jane Morton and Henry C. Murphy Award	University of Chicago	Awarded for making exceptional and unique contributions to the University community
2002	Clinical Research Presentation Award	Chicago Medical Society	Awarded for excellence in clinical research
2003	Clinical Research Presentation Award	Chicago Medical Society	Awarded for excellence in clinical research
2004	Charles Huggins Research Award	University of Chicago, Dept of Surgery	Awarded for excellence in clinical research related to surgery
2004	Clinical Research Presentation Award	Chicago Medical Society	Awarded for excellence in clinical research
2004	Departmental Award	Department of Anesthesia, University of Chicago	Awarded for academic excellence and achievement
2007	Partners in Excellence Award (individual)	Partners Healthcare, Boston, Massachusetts	Awarded for outstanding contribution to clinical care
2008	American Medical Association Foundation Leadership Award	American Medical Association Foundation	Awarded for commitment to legislative advocacy
2008	Commendation for Excellent Service	U.S. Navy Command	Awarded for outstanding service in support of the United States Naval Command
2008	Life Fellow	Boston Medical Library	Awarded for sustained commitment to the preservation of the Boston Medical Library
2008	Patients' Choice Award	American Patient Registry	Awarded for receiving the highest national patient ratings
2009	Research Symposium 1 st place winner	Massachusetts Medical Society	Awarded for excellence in clinical research
2009	Excellence in Tutoring award	Harvard Medical School	Awarded for excellence in medical education
2009	Clinical Research Day 1 st prize award for	MGH Department of Anesthesia	Awarded for excellence in clinical research

	Faculty		
2009	Dean's Community Service Award Nominee	Harvard Medical School	Nominated on behalf of efforts to promote diversity
2009	Partners in Excellence Award (individual)	Partners Healthcare, Boston, Massachusetts	Awarded for leadership and innovation
2009	Citizenship Award	MGH Department of Anesthesia	Awarded for outstanding contributions to the department
2010	Patient Safety Star	Massachusetts General Hospital	Awarded for demonstrated commitment to patient safety
2010	Outreach Award	American Medical Association	Awarded for outstanding service
2011	Best of Category Abstract Award	International Anesthesia Research Society	Awarded for having the best abstract in the bleeding/blood product conservation abstract category
2011	Kosaka Abstract Award	Kosaka Abstract Forum	Awarded for having one of the best five U.S. abstracts at the IARS meeting
2011	Excellence in Teaching Award	Harvard Medical School	Awarded for outstanding teaching contributions
2012	Letter of Appreciation	Department of Health and Human Services	Awarded for outstanding contributions to the AHRQ Effective Health Care Program
2012	Pittinger Award for Excellence in Health Services & Informatics Research	Vanderbilt Department of Anesthesiology	Awarded for publication of the most outstanding original research manuscript
2012	Mentoring Award	American Society of Anesthesiologists	Awarded for outstanding efforts to foster diversity through mentorship
2013	Business Leader of the Year	Nashville GLBT Chamber of Commerce	Awarded for advocacy and support of the GLBT business community
2013	Clinical Care Innovation Challenge	Association of American Medical Colleges	Awarded for successful implementation of programs to address clinical care innovations, including new delivery, payment, and training models, which integrate education and research to improve value and quality
2014	Academy for Excellence in Teaching, Member	Vanderbilt University	Awarded for recognition outstanding teaching ability
2014	Best of Category Abstract Award	International Anesthesia Research Society	Awarded for having the best abstract in the Economics / Education / Policy abstract category
2014	Outstanding Presentation Award for Undergraduate Medical Education	AAMC SGEA	Awarded for most outstanding oral presentation
2014	Military Outstanding Volunteer Service Medal	U.S. Navy	Awarded for providing outstanding, continuous, public community service
2015	LGBT Health Award	Massachusetts Medical	Awarded for making sustained

		Society	contributions to advancing the field of LGBT health
2016	1 st Place Black and White Photography	Department of Veteran Affairs Art Competition	Awarded for outstanding monochromatic photography
2016	1 st Place Color Photography	Department of Veteran Affairs Art Competition	Awarded for outstanding color photography
2016	1 st Place	White House News Photographers Association	Awarded for the NYTimes produced documentary “Transgender, at War and in Love”
2016	Nominee	GLAAD	Media Award for the NYTimes produced documentary “Transgender, at War and in Love”
2016	EMMY Nominee	National Academy of Television Arts & Sciences	News & Documentary: “Transgender, at War and in Love”
2017	Mary Hanna Memorial Journalism Award	Journal of PeriAnesthesia Nursing	Award for “Demographic Predictors of NPO Violations in Elective Pediatric Surgery”
2017	Pittinger Award for Excellence in Health Services & Informatics Research	Vanderbilt Department of Anesthesiology	Awarded for publication of the most outstanding original research manuscript
2017	Diversity Champion Award	Tennessee Hospital Association	Awarded for outstanding contributions in leadership and workplace diversity and inclusion and demonstrated commitment to a diverse workforce
2018	Grand Jury Award	Florida Film Festival	Awarded for the film TransMilitary
2018	Audience Choice Award	South by Southwest	Awarded for the film TransMilitary
2018	Joseph A. Johnson, Jr., Distinguished Leadership Award	Vanderbilt University	For faculty leadership in equity, diversity, and inclusion

Editorial Boards:

2011 - 2013	Journal of Medical Systems, editorial board member
2013 - present	Journal of Medical Systems, Editor-in-Chief
2016 - present	Anesthesia and Analgesia, Associate Editor

Editorial Review Activities:

2009 - present	Anesthesiology, ad hoc reviewer
2009 - 2016	Anesthesia and Analgesia, ad hoc reviewer
2010 - present	Minerva Anesthesiologica, ad hoc reviewer
2010 - present	Indian Journal of Anesthesia, ad hoc reviewer
2011 - present	AHRQ Effective Health Care, ad hoc reviewer
2012 - present	Transactions on Intelligent Systems and Technology, ad hoc reviewer
2012 - present	Annals of Surgery, ad hoc reviewer
2012 - present	British Journal of Anaesthesia, ad hoc reviewer
2012 - present	Drugs and Aging, ad hoc reviewer
2012 - present	PLoS Medicine, ad hoc reviewer

2012 - present	Journal of Clinical Monitoring and Computing, ad hoc reviewer
2012 - present	Journal of American Medical Informatics Association, ad hoc reviewer
2013 - present	Expert Opinion on Drug Delivery, ad hoc reviewer
2013 - present	Journal of Hospital Medicine, ad hoc reviewer
2013 - present	Journal of Biomedical Informatics, ad hoc reviewer
2013 - present	Pain Practice, ad hoc reviewer
2014 - present	PLOS ONE, ad hoc reviewer
2014 - present	Journal of Diabetes Science and Technology, ad hoc reviewer
2015 - present	Annals of Internal Medicine, ad hoc reviewer

Grant Review Activities:

2011 - present	American Institute of Biological Sciences, ad hoc reviewer
2013 - present	American Medical Association Foundation, ad hoc reviewer
2014 - present	National Institute of Academic Anaesthesia (U.K.), ad hoc reviewer

Scientific Meeting Abstract Review Activities:

2011	American Society of Anesthesiologist Annual Meeting
2011	ACM SIGHIT International Health Informatics Symposium
2012	Society for Technology in Anesthesia Annual Meeting
2012	American Society of Anesthesiologist Annual Meeting
2012	International Anesthesia Research Society Annual Meeting
2013	American Society of Anesthesiologist Annual Meeting
2013	International Anesthesia Research Society Annual Meeting
2014	American Society of Anesthesiologist Annual Meeting
2014	International Anesthesia Research Society Annual Meeting
2014	The AAMC Medical Education Meeting
2015	International Anesthesia Research Society Annual Meeting
2015	American Society of Anesthesiologist Annual Meeting
2015	INFORMS Healthcare Conference Technical Co-Sponsor
2016	International Anesthesia Research Society Annual Meeting
2016	American Society of Anesthesiologist Annual Meeting
2017	International Anesthesia Research Society Annual Meeting
2017	American Society of Anesthesiologist Annual Meeting
2018	International Anesthesia Research Society Annual Meeting
2018	American Society of Anesthesiologist Annual Meeting

Scientific Meeting Moderator Activities:

2010	American Society of Anesthesiologists Annual Meeting, San Diego, CA Poster Discussion Moderator
2011	International Anesthesia Research Society Annual Meeting, Vancouver, CA Poster Discussion Moderator
2011	American Society of Anesthesiologists Annual Meeting, Chicago, IL Poster Discussion & Oral Session Moderator
2012	International Anesthesia Research Society Annual Meeting, Boston, MA Poster Session Discussion Moderator
2012	American Society of Anesthesiologists Annual Meeting, Washington, DC Poster Session Discussion Moderator

- 2013 International Anesthesia Research Society Annual Meeting, Boston, MA
Poster Session Discussion Moderator
- 2015 American Society of Anesthesiologists Annual Meeting, San Diego, CA
Poster Session Discussion Moderator
- 2016 International Anesthesia Research Society Annual Meeting, San Francisco, CA
Poster Session Discussion Moderator
- 2016 American Society of Anesthesiologists Annual Meeting, Chicago, IL
Poster Session Discussion Moderator
- 2017 International Anesthesia Research Society Annual Meeting, Washington, DC
Poster Session Discussion Moderator
- 2017 American Society of Anesthesiologists Annual Meeting, Boston, MA
Poster Session Discussion Moderator

Report of Local Teaching and Training

Teaching of Students in Courses

2006-2010	Classroom to Clerkship Program Third Year Medical Students	Harvard Medical School 1 session of 3.5 hours
2008-2010	Patient Doctor II-IN761.3 Second Year Medical Students	Harvard Medical School 2 sessions of 4 hours each
2008-2010	Integrated Human Physiology – IN752.0 First year Medical and Dental Students	Harvard Medical School 15 sessions of 1.5 hours each
2010	Introduction to the Profession – IN555.0 First year Medical and Dental Students	Harvard Medical School 4 sessions of 2.5 hours each
2011-2013	Preceptorship in Clinical Medicine First year Medical Students	Vanderbilt University School of Medicine 8 sessions of 3 hours each
2011-present	Population Based Health Care – N225 First year Nursing Students	Vanderbilt University School of Nursing 1 session of 2 hours
2012-present	Clinical Continuity Experience –Medical Students (all 4 years)	Vanderbilt University School of Medicine 3 afternoon sessions of 4-hours each week
2012-present	Sex, Sexuality, and Sexual Health – Fourth year Medical Students	Vanderbilt University School of Medicine 5 morning sessions of 4-hours x 4 weeks
2012-present	Health Policy, Social Activism, and Surgery: Development of Community- Based Leadership in Surgery	Vanderbilt University School of Medicine 2 sessions of 2-hours x 3 months
2012-present	American Medicine and the World – MHS 208, Undergraduate Students	Vanderbilt University, 1 session of 90 minutes each semester (fall / spring)
2014-present	Biomedical Informatics 318, Graduate Students	Vanderbilt University School of Medicine, Semester long research rotation
2014	Computer Science 240, Undergraduate Students	Vanderbilt University, Semester long research elective
2015	Quality Improvement & Patient Safety, Block Director	Vanderbilt University School of Medicine, Month long required immersion course
2015-present	Professional Development Rotation, Rotation Director	Department of Anesthesiology, Vanderbilt University
2016-present	LGBTI Health in Inter-professional Practice	Vanderbilt University School of Nursing

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

2005-2006	Internal Medicine Airway Rotation Medical Residents	Harvard Medical School 14 residents for 2 week blocks each
2008	MGH Anesthesia Residency Core Curriculum	Harvard Medical School
2009	First Year Anesthesia Residents MGH Residency Core Curriculum	1 sixty minute session Harvard Medical School
2009	Second/Third Year Anesthesia Residents MGH Anesthesia Residency Core Curriculum	1 sixty minute session Harvard Medical School
2009	First Year Anesthesia Residents Anesthesia Residency Core Curriculum	1 sixty minute session Beth Israel Deaconess Medical Center
2010- present	Anesthesia Residents Neurosurgery Rotation Curriculum	1 sixty minute session Vanderbilt University Medical School
2012- present	Anesthesia Residents Vanderbilt Shadowing Program, Undergraduate Pre-Medical Students	1 thirty minute session, monthly Vanderbilt University
2012- present	Anesthesia Core Lecture Series	10 three hour sessions each semester Vanderbilt University Medical Center 1 thirty minute session, quarterly

Clinical Supervisory and Training Responsibilities

2004-2005	Taught fundamentals of clinical medicine, physical and differential diagnosis, appropriate selection and interpretation of laboratory tests and integration of medical data to medical students/ Massachusetts General Hospital	Daily
2005-2008	Clinical Anesthesia Training for junior residents during call and one on one tutoring of senior medical students/ Massachusetts General Hospital	Weekly
2008-2010	Supervision and clinical teaching of residents physicians at all levels/ Massachusetts General Hospital	Twice Weekly
2010-present	Supervision and clinical teaching of residents physicians at all levels/ Vanderbilt University Medical Center	Twice Weekly

Formally Supervised Trainees

2008-2009	Victoria Forbes, M.S. / Masters Student in Biomedical Sciences Served as Master's thesis advisor for Ms. Forbes whose work was on "Racial and Ethnic Disparities in Perioperative Care"
2009	Angela Lipshulz, M.D., M.P.H./ Resident in Anesthesia Tutoring 110 hours / 2weeks – During this time Dr. Lipshulz obtained the necessary skills and confidence to function within the operating room environment in the typical 1:2 faculty to trainee paradigm.
2009-2013	Jonathan P. Wanderer, M.D., M.Phil. / Resident in Anesthesia Research Mentor – During this time, Dr. Wanderer developed an understanding of how to apply advanced informatics approaches to clinical research including the performance of a variety of studies evaluating enhancements to anesthesia information management systems
2010	Mark Young, M.D., / Resident in Anesthesia Tutoring 110 hours / 2weeks – During this time Dr. Young was introduced to the medical specialty of anesthesiology and began his research career with the successful publication of a case report.
2010-2011	Anoop Rao, M.D., M.S./ Informatics Fellow

Fellowship advisor – During this time Dr. Rao obtained a number of skills intended to translate advanced research in biomedical informatics into improved clinical practice. Specifically, he focused on the utilization of technology to transform the health care system by improving outcomes, patient experience and access to care under Dr. Ehrenfeld’s mentorship.

- 2010-2014 Ilana Stol, Medical Student
Emphasis program advisor – During this two year student-mentor relationship, Ms. Stol developed and initiated a clinical research proposal related to understanding the impact of anesthesia information management systems on compliance with national quality measures
- 2010-2013 Jeremy Jones, M.D., / Resident in Anesthesia
Faculty mentor – During this time, I served as Dr. Jones’ faculty mentor.
- 2011-2013 Jennifer Maziad, M.D., / Resident in Anesthesia
Faculty mentor – During this time, I served as Dr. Maziad’s faculty mentor.
- 2011-2015 Sean Chester, Medical Student
Emphasis program advisor – During this two year student-mentor relationship, Mr. Chester developed and administered a survey to medical center staff, faculty, and trainees designed to assess opportunities and barriers to providing culturally competent care
- 2012 Monika Jering, Medical Student
Masters Thesis advisor – During this six month student-mentor relationship, Ms. Jering performed a complex analysis of intraoperative patient trajectory correlating physiology to 30 day outcomes leading to the publication of two manuscripts
- 2013 Masters Thesis advisor – Rimmert van der Kooij – During this six month student-mentor relationship, Mr. van der Kooij performed a simulation analysis of a novel approach to surgical block scheduling
- 2014 Masters Thesis advisor – Rachel Gosine – During this six month student-mentor relationship, Ms. Gosine performed an analysis of a preoperative laboratory testing patterns and health care disparities
- 2016-2018 Calvin Gruss, M.D., / Resident in Anesthesia
Faculty mentor – During this time, I served as Dr. Gruss’ faculty mentor.
- 2017- present Matthew Semler, M.D., / Pulmonary & Critical Care Faculty
Serve as member of K23 research advisory committee
- 2018- present Sarah Osmundson, M.D., / Maternal Fetal Medicine Faculty
Serve as member of K23 research advisory committee

Formal Teaching of Peers (e.g., CME and other continuing education courses)

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| 2008-2010 | Harvard Advanced Airway Management Course “Rigid Fiberoptic Devices” | Brigham and Women’s Hospital |
| 2008 | Anesthesia Choices/ Invited lecture
Harvard Medical School Department of Continuing Medical Education, Anaesthesia in the Office Based Setting | Harvard Medical School |
| 2010 | OR of the Future/ Panel Presentation
Harvard Anesthesia Update | Harvard Medical School |
| 2010 | Operating Room Efficiency / Invited lecture
Harvard Medical School Department of Continuing Medical Education, Anaesthesia in the Office Based Setting | Harvard Medical School |
| 2013 | Real-Time Decision Support / Invited Lecture
Mt Sinai Annual Anesthesia Update | Mt Sinai School of Medicine |
| 2013 | Perioperative ACLS | American Society of |

		Anesthesiology Annual Meeting
2014	Real-Time Decision Support / Invited Lecture Mt Sinai Annual Anesthesia Update	Mt Sinai School of Medicine
2016	Real-Time Decision Support / Invited Lecture Mt Sinai Annual Anesthesia Update	Mt Sinai School of Medicine
2017	Real-Time Decision Support / Invited Lecture Mt Sinai Annual Anesthesia Update	Mt Sinai School of Medicine
2017	Anesthesia Camp – DestinationCME	Vanderbilt University School of Medicine

Report of Funded and Unfunded Projects:

Funding Information - Current

2017-2019 Automatic Sensing for Clinical Documentation
The US Army Medical Research and Materiel Command (USAMRMC), Hands-Free Electronic Health Record Data Entry Initiative (HFEHRI)
Co-Investigator / total direct costs: \$1,760,528

The goal of this project is to develop a novel hands free clinical documentation system for use in the operational environment which leverage off-the-shelf sensors, accelerometers, and cameras to build a system that automatically detects the motion signatures associated with key clinical tasks and generate an abbreviated care record, which can be transmitted upstream.

2016-2021 Improving Clinical Trial Education, Recruitment, And Enrollment At CTSA Hubs (I-CERCH)
1U24TR001579
Co-Investigator / total direct costs: \$2,730,290

The overall goal of this project is to to establish a Recruitment Innovation Center that will develop and test innovative approaches to engaging minorities, women and older adults in clinical trials including studying interventions to improve trust, one of the most commonly-cited barriers to research participation.

2016-2018 Understanding the Impact of Federal EHR Incentives on Transgender Care
1U54 MD008173
PI / total direct costs: \$50,000

The overall goal for this study is to understand the impact of federal electronic health record incentive policies on the provision of care to transgender patients, which will inform future policy discussions. This will be accomplished by determining comparative health care utilization trends among transgender and cisgender individuals, and by determining the impact of the meaningful use incentive program on transgender individual's healthcare utilization and outcomes.

2016-2021 Identification, Extraction and Display of Clinical Data Patterns with Application to

Anesthesia Workflows

R01 EB020666-01A1

Co-Investigator / total direct costs \$900,000

This project is designed to develop data science/Big Data methods to extract meaningful data patterns from population-scale data that can support a clinician in these tasks.

2013-2018 Accelerating Change in Medical Education
American Medical Association
Co-Investigator/ total direct costs: \$1,000,000

The three goals of this proposal are to (1) embed learning in the workplace throughout undergraduate medical education, (2) create a competency-based assessment system that guides student learning with explicit, standardized expectations, and provides accurate information for high stakes decisions independent of time in the educational program, and (3) develop a process for personalized learning plans guided by individual student strengths, needs and interests, and facilitated by a comprehensive electronic portfolio that collects and displays assessment data, and links to the curriculum management system and the electronic health record.

2015-2018 Congressionally Directed Medical Research Programs, Department of Defense
“VIPER II: Chronic Pain After Amputation: Inflammatory Mechanisms, Novel Analgesic Pathways, and Improved Patient Safety”
Co-Investigator/total direct costs: \$388,254

The overall goals of this research project are to (1) define the role of the Wnt pathway in determining systemic inflammatory phenotype and prevention of mechanical allodynia in an animal model of peripheral nerve injury, (2) test the efficacy of TGR-5 agonists for the treatment of mechanical allodynia in an animal model of peripheral nerve injury, and (3) utilize pharmacogenomic predictors to improve the safety and efficacy of current opioid treatments

Funding Information - Past

2013-2014 “Cornelius - A Randomized Controlled Trial of a Real-Time Predictive Modeling Decision Support System”
Vanderbilt Clinical Translational Research Institute
Co-Investigator/ total direct costs: \$153,567
The goal of this project is to evaluate the ability of a series of predictive models to reduce patient harm and 30-day readmissions in a prospective randomized fashion

2012-2013 “Enhancing Perioperative Safety Through the Determination of Intraoperative Predictors of Post-Operative Deterioration”
Anesthesia Patient Safety Foundation
PI/ total direct costs: \$150,000
The goal of this project is to determine intraoperative predictors of unanticipated postoperative patient deterioration / ICU transfer utilizing advanced statistical modeling

and machine learning techniques.

- 2008-2009 “Automatic Detection and Machine Assisted Correction of Intraoperative Monitoring Gaps During Anesthesia”
Research Fellowship Grant – Foundation for Anesthesia Education and Research
PI/ total direct costs: \$50,000
This multi-center clinical research project was designed to understand how real-time notification systems impact clinical practice and provider behavior by implementing a real-time, automatic physiologic monitoring gap detection and alert system. The project revealed a statistically significant reduction in physiologic monitoring gaps for patients undergoing general anesthesia.
- 2008 “Analysis of Defensive Medicine Practice in Massachusetts”
Foundation Grant – Massachusetts Medical Society
Co-Investigator/ total direct costs: \$100,000
The goals of this study were to understand the extent to which physicians in Massachusetts practice defensive medicine and the associated costs to the overall health care system by the administration of a statewide survey of Massachusetts physicians among eight medical and surgical sub-specialties. Using multiple imputation analysis and cost data from insurance providers, we concluded that defensive medicine is a significant factor in health care costs (\$281 million/year in Massachusetts alone) and of marginal benefit to patients.
- 2008-2009 “Anesthesia Pre-Operative Evaluation Redesign Initiative”
Physician Education/Care Delivery Reengineering Innovation Grant – Partners Healthcare [internal]
PI/ total direct costs: \$100,000
The goal of this project is to improve physician education by enhancing the time available for effective teaching and learning through the reengineering of the process by which inpatient pre-operative evaluations are performed. By creating a comprehensive system for tracking preoperative evaluations, a web-based record retrieval system, and a novel electronic pre-operative evaluation completion tool with decision support capabilities, we expect to provide a significant cumulative time savings and significantly enhanced education around the issues of preoperative management.
- 2008-2010 “Integrating Data, Models and Reasoning in Critical Care”
NIH-GMS T32 (GM07592)
Research Fellow
We are undertaking a project in which we will apply machine learning and modeling techniques to patient data in order to develop and evaluate new predictive algorithms related to intraoperative hemodynamics. The ultimate goal of this work is to develop new technologies that can positively impact intraoperative patient safety by shifting our current information management systems notifications from reactive alerts to critically useful prediction tools.
- 2009-2011 “Prevention of Perioperative Positioning Related Injuries”
Prevention Above All Discoveries Grant Program – Medline Industries [industry sponsored grant]

PI/ total direct costs: \$100,000

This project is designed to understand the incidence, risk factors and etiology of perioperative positioning related injuries so that efforts may be developed to reduce the overall incidence of these problems. Part of this project includes the development and implementation of a novel perioperative positioning injuries prevention program which will integrate education, systems level changes, and the provision of evidence-based products to change the process of care used for patients at risk of developing positioning injuries in the hospital and across multiple services.

2010 “Virtual Monitoring Station: A Prototype”

PI/ total direct costs: \$15,000

Center for Integration of Medicine & Innovative Technology / U.S. Army Medical Research Acquisition Activity (USAMRAA) Cooperative Agreement W81XWH-09-2-0001

2011 “Mapping Intraoperative Events for Use in Secondary Systems”

Internationalization in Medical Technology, Norwegian University of Science and Technology

PI/ total direct costs: NOK 35 000

Previous Unfunded Projects

2006-2008 Co-Investigator/ “ Data-mining an Anesthesia Information Management System Database for Retrospective Quality Control”

We are currently utilizing advanced data mining techniques in order to: (1) characterize clinicians’ intra-operative temperature measurement and management, (2) determine the true incidence of decompressive laminectomy for hematoma after epidural catheterization utilizing a multi-center data set, and (3) characterize the management and outcomes of rate-related ECG changes during anesthesia

2009-2011 Co-Investigator/“Cognitive Aspects of Physician-Patient Communication”

In this project to improve preoperative preparation of patients needing anesthesia for surgery, we discovered that clinicians universally exceed their patients’ cognitive capacities, despite the use of reinforcing activities, and this was reflected in poor recall of specific details of pre-anesthetic instructions.

2009-2014 PI/ “Racial and Ethnic Disparities in Anesthesia Care”

The aim of this multicenter study is to evaluate whether or not there are racial and ethnic disparities in the delivery of perioperative care. We are performing this analysis by evaluating a number of operational variables and outcome measures amongst a large cohort of matched patients of different racial / ethnic backgrounds.

2009-2013 PI/ “Impact of Technology on Blood Ordering Practices and Patient Outcomes”

The aim of this multipart study is to evaluate the impact of (a) a non-invasive continuous hemoglobin monitoring during elective surgery, (b) a novel electronic intraoperative blood ordering system, (c) a predictive algorithm for prospectively estimating blood product utilization during surgery.

Publications:

Peer reviewed research publications

1. Silverstein, J.C., **Ehrenfeld, J.M.**, Small, S., Cook, S., & Dech, F. “Tele-Immersion: Preferred Infrastructure for Anatomy Instruction” *Journal of Computing in Higher Education*. 2006: **18** (1) 1-14.
2. Sandberg, W.S., Sandberg, E.H., Seim, A.R., Anupama, S, **Ehrenfeld, J.M.**, Spring, S.F. & Walsh, J.L. “Real-Time Checking of Electronic Anesthesia Records for Documentation Errors and Automatically Text Messaging Clinicians Improves Quality of Documentation” *Anesthesia and Analgesia*. 2008 Jun;106(6):1847-52. doi: 10.1213/ane.0b013e31816f24d5.
3. **Ehrenfeld, J.M.**, Walsh, J.L. & Sandberg, W.S. “Right and Left Sided Mallinckrodt Double Lumen Tubes Have Identical Clinical Performance” *Anesthesia & Analgesia*. (2008) **106** (6) 1847-1852.
4. **Ehrenfeld, J.M.**, Sandberg, W.S. “Incidence of Intraoperative Gaps in Patient Monitoring During Liver Transplantation” *Liver Transplantation*. (2008) **14**(7) S81.
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Management and Outcome of Documented Intraoperative Heart Rate-Related EKG Changes” *Journal of Cardiothoracic and Vascular Anesthesia*. (2011) Oct; 25(5): 791-798. DOI: 10.1053/j.jvca.2011.03.174.

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 14. Hobai, I. A., Gauran, C., Chitilian, H.V., **Ehrenfeld, J.M.**, & Sandberg, W.S. “Significance and Management of Intraoperative Heart Rate - Related EKG Changes” Presented at: American Society of Anesthesiologists Annual Meeting, San Francisco, CA, 10/07. *Anesthesiology* 107 A1262.
 15. **Ehrenfeld, J.M.**, Seim, A.R., Berger, D.L., & Sandberg, W.S. “Development of a Direct Discharge Pathway for Laparoscopic Cholecystectomy Patients” Presented at: American Society of Anesthesiologists Annual Meeting, San Francisco, CA, 10/07. *Anesthesiology* 107 A1045.
 16. **Ehrenfeld, J.M.** & Sandberg, W.S. “A Novel Method for Creating Alerts of Intra-Operative Gaps in Patient Monitoring During Anesthesia” Presented at: International Anesthesia Research Society 82nd Clinical & Scientific Congress, San Francisco, CA, 3/08. *Anesthesia & Analgesia* 106 S-110.
 17. **Ehrenfeld, J.M.**, Walsh, J., Spring, S., & Sandberg, W.S. “Continuous Quality Improvement in Anesthesia, Driven by Real Time Data Analysis and Automatic Alerting” Presented at: International Forum on Quality and Safety in Health Care, Paris, France, 4/08.
 18. Hobai, I., **Ehrenfeld, J.M.**, & Sandberg, W.S. “Management of Intraoperative Rate Related EKG Changes” Presented at: Association of University Anesthesiologists Annual Meeting, Durham, NC, 5/08.
 19. **Ehrenfeld, J.M.** & Sandberg, W.S. “Incidence of Gaps in Physiologic Monitoring During Liver Transplantation” Presented at: 2008 Joint International Congress of ILTS, ELITA & LICAGE, Paris, France, 7/08.
 20. Epstein, R.H, Dexter, F., **Ehrenfeld, J.M.** & Sandberg, W.S. “Implications of Event Entry Latency on Anesthesia Information Management System Decision Support Systems” Presented at: American Society of Anesthesiologists Annual Meeting, Orlando, FL, 10/08. *Anesthesiology* 108 A1208.
 21. Bateman, B., **Ehrenfeld, J.M.**, & Sandberg, W.S. “Anesthesia Information Systems Detect Rare Complications: Case Example - Epidural Hematomas” Presented at: American Society of Anesthesiologists Annual Meeting, Orlando, FL, 10/08. *Anesthesiology* 108 A1631.

22. **Ehrenfeld, J.M.** Spring, S., Pierce E., Peterfreund R., Forbes V., & Sandberg, W.S. "Utilization Of An Anesthesia Information Management System For Physician Credentialing" Presented at: International Anesthesia Research Society 83rd Clinical & Scientific Congress, San Diego, CA, 3/09. *Anesthesia & Analgesia* 107 S-78.
23. Epstein, R.H., **Ehrenfeld, J.M.**, Sandberg, W.S., and Vigoda, M.M. "Frequency of Prolonged Gaps In Blood Pressure Documentation In Anesthesia Information Management Systems" Presented at: International Anesthesia Research Society 83rd Clinical & Scientific Congress, San Diego, CA, 3/09. *Anesthesia & Analgesia* 107 S-99.
24. **Ehrenfeld, J.M.**, Spring, S., Pierce E., Peterfreund R., Forbes V., & Sandberg, W.S. "Development of Novel Metrics for Physician Credentialing" Presented at: Massachusetts Medical Society, 2009 Annual Educational Program, Boston, MA, 5/09.
25. Sandberg W.S., **Ehrenfeld, J.M.**, Walsh, J.L., Spring, S.F. "Computer Driven Performance Improvement in Anesthesia Practice" Presented at: Euroanesthesia, Milan, Italy, 6/09. *Eur J Anaesthesiol* 2009; 26 (Suppl 45): 3AP6-1.
26. Sandberg, W.S., Spring, F.S., Xue, F., Paul, S., **Ehrenfeld, J.M.** "Effective Reduction of Anesthesia Drug Costs: Implementation & Outcomes" Presented at: American Society of Anesthesiologists Annual Meeting, New Orleans, LA, 10/09.
27. **Ehrenfeld, J.M.**, Sandberg, W.S. "Utilization of AIMS Data for Physician Credentialing: Challenges and " Presented at: Society for Technology in Anesthesia Annual Meeting, West Palm Beach, FL, 1/10.
28. **Ehrenfeld, J.M.**, Cassidy, E., Forbes, V.E., Sandberg, W.S. "Modified Rapid Sequence Induction: A Survey Of U.S. Current Practice" International Anesthesia Research Society Annual Meeting, Honolulu, HI, 3/10
29. **Ehrenfeld, J.M.**, Funk, L.M, Van Schalkwyk, J., Merry, A., Sandberg, W.S., Gawande, A. "An Estimation of the Global Incidence of Prolonged Hypoxemia During Surgery" Burden of Surgical Disease Annual Meeting, Nashville, TN, 3/10
30. BobbieJean Sweitzer, Michael Vigoda, Nikola Milokjic, Ben Boedeker, Kip D. Robinson, Michael A. Pilla, Robert Gaiser, Angela F. Edwards, Ronald P. Olson, Matthew D. Caldwell, Shawn T. Beaman, Jeffrey A. Green, **Jesse M. Ehrenfeld**, Marsha L. Wakefield, Praveen Kalra, David M. Feinstein, Deborah C. Richman, Gail Van Norman, Gary E. Loyd, Paul W. Kranner, Stevin Dubin, Sunil Eappen, Sergio D. Bergese, Suzanne Karan, James R. Rowbottom, and Keith Candiotti Residents' Knowledge of ACC/AHA Guidelines for Preoperative Cardiac Evaluation Is Limited (2010) *Cleveland Clinic Journal of Medicine* Mar; 77(Electronic Suppl 1):eS11-eS12.
31. **Ehrenfeld, J.M.**, Cassidy, E., Forbes, V.E., Sandberg, W.S. "Modified Rapid Sequence Induction: A Survey Of U.S. Current Practice" Association of University Anesthesiologists Annual Meeting, Denver, CO, 4/10
32. **Ehrenfeld, J.M.**, Sandberg, W.S., Warren, L., Kwo, J., Bickmore, T. "Use of a Computer Agent To Explain Anesthesia Concepts to Patients" Presented at: American Society of Anesthesiologists Annual Meeting, San Diego, CA 10/10.
33. Nozari, A., **Ehrenfeld, J.M.**, Peterfreund, R.A. "Alterations in Serum Electrolytes after Elective Intracranial Neurosurgical Procedures" Presented at: American Society of Anesthesiologists Annual Meeting, San Diego, CA 10/10.

34. **Ehrenfeld, J.M.**, Blum, J., Raghavendran, K. “Intraoperative Alerts for the Management of Patients with Preexisting Hypoxia and Potential Acute Lung Injury” United States Critical Illness and Injury Trials Group Fall Meeting, National Institutes of Health, Bethesda, MD 11/10.
35. St. Jacques, P., **Ehrenfeld, J.M.**, Furman, W. “Application of AIMS data to the Development of an Optimal Care Score for Anesthesiologists” Society for Technology in Anesthesia, Las Vegas, NV 1/11
36. Silvestri, S., O’Connor, C., Morrissey, L., Hemingway, M., Meyers, K., Pedro, J., **Ehrenfeld, J.M.** “Multidisciplinary Approach to Prevention of OR Positioning Injuries” Association of periOperative Registered Nurses, Philadelphia, PA 3/11
37. Hill, B., **Ehrenfeld, J.M.**, Guillamondegui, O. “Risk Factors for Free Flap Failure” Tennessee Society of Plastic Surgeons, Nashville, TN 4/11
38. Geiger, T. M., Horst, S., Muldoon, R., Wise, P, **Ehrenfeld, J.M.**, Herline, A. “Peri-operative core body temperatures effect on outcome after colorectal resections” American Society of Colon & Rectal Surgeons, Vancouver, Canada, 5/11
39. **Ehrenfeld, J.M.**, Higgins, M.S., Hersey, S., Eagle, S., Sandberg, W.S. “Pilot Implementation & Assessment Of A Computerized Preanesthetic Assessment Tool” International Anesthesia Research Society Annual Meeting, Vancouver, Canada, 5/11
40. Henneman, J.P., **Ehrenfeld, J.M.** “A Predictive Model For Intraoperative Blood Product Requirements” International Anesthesia Research Society Annual Meeting, Vancouver, Canada, 5/11
41. Wanderer, J.W., Rothwell, S., **Ehrenfeld, J.M.**, “Anesthesia Information Management System Ergonomics: A Novel Method For Analyzing Documentation Workflow” International Anesthesia Research Society Annual Meeting, Vancouver, Canada, 5/11
42. Rao, A., **Ehrenfeld, J.M.** “Optimal Sampling Frequency Of Pulse Oxygen Saturation (SpO₂) In Anesthetized Patients During Surgery” International Anesthesia Research Society Annual Meeting, Vancouver, Canada, 5/11
43. Rao. A., Peterfreund, R.S., Zalis, M., Harris, M., **Ehrenfeld, J.M.** “Automated Analysis Of Free Text Electronic Medical Records To Identify Patients With Specific Medical Diagnoses” International Anesthesia Research Society Annual Meeting, Vancouver, Canada, 5/11
44. **Ehrenfeld, J.M.**, Flahive, C., Forbes, V., Winkfield, K., St. Jacques, P., Sandberg, W.S. “Racial and Ethnic Disparities in Intraoperative Care” Association of University Anesthesiologists Annual Meeting, Philadelphia, PA 5/11
45. Garcia A.E., Bonnaig J.V., Yoneda Z.T., Richards J.E., **Ehrenfeld J.M.**, Jahangir A.A., Obremsky W.T., Sethi M.K. “Patient Variables which may Predict Length of Stay and Hospital Costs in Elderly Patients with Hip Fracture.” Annual Meeting of the Orthopaedic Trauma Association, San Antonio, TX 5/11
46. **Ehrenfeld, J.M.**, Hersey, S., Higgins, M., Sandberg, W.S. “Validation And Pilot Testing Of A Novel Web-Based Computerized Preanesthetic Evaluation Tool” Society for Medical Innovation and Technology, Tel Aviv, Israel 9/11

47. Bouarfa, L., Tax, D., **Ehrenfeld, J.M.**, Rothman, B., Dankelman, J. “Predicting Post Anesthesia Care Unit Length Of Stay” Society for Medical Innovation and Technology, Tel Aviv, Israel 9/11
48. **Ehrenfeld, J.M.**, Flahive, C., Forbes, V., Winkfield, K., St. Jacques, P., Sandberg, W.S. “Racial and Ethnic Disparities in Intraoperative Anesthesia Care” 22nd International Congress of the Israel Society of Anesthesiologists, Tel Aviv, Israel 9/11
49. Garcia, A., Bonnaig J.V., Yoneda, Z.T., Richards, J.E. **Ehrenfeld, J.M.**, Sethi, M.K.; Jahangir, A.A., Obremskey W.T. “Patient variables which may predict length of stay and incurred hospital costs in elderly patients with low energy hip fracture” Orthopaedic Trauma Association Meeting Annual Meeting, San Antonio, TX 10/11.
50. Tourjee S.M., Obremskey, W.T., Castillo, R.C., Abraham, C.M., **Ehrenfeld J.M.**, Phelps, K.D., Naik, R.D., Archer, K.R. “The impact of nerve blocks on opioid use and hospital length of stay in patients with traumatic lower-extremity injury” Orthopaedic Trauma Association Meeting Annual Meeting, San Antonio, TX 10/11.
51. FitzHenry, F., Doran, J.B., Dietrich, M.S., LittleJohn, S., Chen, Y., Matheny, M.E., **Ehrenfeld, J.M.**, Wells, N. “Nursing Non-Pharmacologic Interventions in Post-Operative Pain” American Medical Informatics Association Annual Symposium, Washington, D.C. 10/11.
52. Hill, J.B., Patel, A., Del Corral, G., Guillamondegui, O., **Ehrenfeld, J.M.**, Shack, B. “The Impact of Pre-Operative Anemia on Free Flap Morbidity” Northeastern Society of Plastic Surgeons 28th Annual Meeting, Amelia Island, FL 10/11.
53. Backman, E.S., **Ehrenfeld, J.M.**, Triant, V.A., Arpino, P.A., Lu, Z., Losina, E., Gandhi, R.T. “Safety of Intravenous Midazolam for Procedural Sedation in HIV-infected Patients on Antiretroviral Therapy” 49th Annual Meeting of the Infectious Diseases Society of America and the HIV Medicine Association, Boston, MA 10/11.
54. Rothman, B., Bouarfa, L., Tax, D., **Ehrenfeld, J.M.** “Determinants of Post Anesthesia Care Unit Length of Stay” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
55. Sandall, J.C., Shi, Y, Schildcrout, J., Deppen, S., **Ehrenfeld, J.M.**, Putnam, J.B., Riedel, B., Pretorius, M. “A Retrospective Analysis of Statin Use and Outcomes After Thoracic Cancer Surgery” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
56. Henneman, J.P., Martinez, E.A., **Ehrenfeld, J.M.**, Eikermann, M. “The Use of Intermediate Acting Neuromuscular Blocking Agents is Associated with Increased Postoperative Respiratory Complications” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
57. **Ehrenfeld, J.M.**, Hooper, W.B., Sandberg, W.S. “Noninvasive Cardiac Output Monitoring Compared to Thermodilution in Orthotopic Liver Transplantation” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
58. Mehta, P., Walsh, J., **Ehrenfeld, J.M.**, Jiang, Y. “Efficacious Use of Inhalation Agents” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
59. Mehta, P., Walsh, J., **Ehrenfeld, J.M.**, Jiang, Y. “Environmentally Conscious Anesthesia: Impact of Waste Inhalation Agents” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.

60. **Ehrenfeld, J.M.**, Reynolds, P., Hersey, S., Campbell, B.A., Sandberg W.S. “Pilot Implementation & Assessment of a Computerized Preanesthetic Assessment Tool” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
61. King, A.B., Weavind, L., **Ehrenfeld, J.M.** “Preoperative and Intraoperative Predictors of Post-Operative Acuity and Transitions in Care” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
62. Jones, J.C., Hoffman, S., Berry, J.M., **Ehrenfeld, J.M.**, “Relative Safety of Blind vs Ultrasound Guided Internal Jugular Central Line Placement” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
63. **Ehrenfeld, J.M.**, Sedykh, A., Furman, W.R. “Management of Potassium Abnormalities on the Day of Surgery: A Retrospective Review” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/11.
64. Hester, D., Wanderer, J., Frazier, K., **Ehrenfeld, J.M.** “The Methodology in Creating a Stewardship System of Pharmaceutical Costs for Anesthesia Providers” Society for Technology in Anesthesia, West Palm Beach, FL 1/12.
65. Garcia, A.E., Bonnaig, J.V., Yoneda, Z., Richards, J.E., **Ehrenfeld, J.M.**, Sethi, M.K., Jahangir, A.A., Obremskey, W. “Patient Variables Which May Predict Length of Stay and Hospital Costs in Elderly Patients with Hip Fracture” American Academy of Orthopedic Surgeons , San Francisco, CA 2/12.
66. Tourjee, S., Obremsky, W., Castillo, R.C., Abraham, C.M., Phelps, K., Naik, R.D., **Ehrenfeld, J.M.**, Archer, K. “The Impact of Nerve Blocks on Opioid Use and Hospital Length of Stay in Patients with Traumatic Lower-Extremity Injury” American Academy of Orthopedic Surgeons, San Francisco, CA 2/12.
67. **Ehrenfeld, J.M.**, Rosenberg, N., Gallagher, S., Stenglein, J., Urman, R.D., Shapiro F. “Training Office Personnel in the Implementation of a Comprehensive Safety Checklist for Office-Based Anesthesia and Surgery,” World Congress of Anesthesiologists, Buenos Ares, Argentina. 3/12.
68. **Ehrenfeld, J.M.**, Gokhale, A., Koutsoukos, X., Schmidt, D.C. “A Closed Loop Control Architecture to Maintain Patient Normothermia During Perioperative Periods,” ACM/IEEE Third International Conference on Cyber-Physical Systems, Beijing, China, 4/12.
69. Kay H., Sathiyakumar V., McDonald, M.R.: Lee Y.M., Apfeld J.C., Perdue A.M., **Ehrenfeld J.M.**, Obremskey W.T.; Sethi M.K. “Isolated Sacral Injuries: Postoperative Length of Stay, Complications, and Readmission.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
70. Garcia A.E., Bonnaig J.V., Yoneda Z.T., Richards J.E., **Ehrenfeld J.M.**, Obremskey W.T., Jahangir A.A., Sethi M.K. “Patient Variables That May Predict Length of Stay and Hospital Costs in Elderly Patients with Hip Fractures.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
71. Kang B., Alamanda V., Yoneda Z.T., **Ehrenfeld J.M.**, Sethi M.K., Jahangir A.A., Obremskey W.T. “The Orthopaedic Trauma Patient: Risk Factors Influencing Follow Up.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
72. McClure D.J., Armstrong T.J., Jahangir A.A., **Ehrenfeld J.M.**, Obremskey W.T., Marolen K.N., Sethi M.K. “Do Open Fractures Influence Postoperative Length of Stay? A Retrospective

- Review of Isolated Femur and Tibia Fractures at a Level 1 Trauma Center.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
73. McDonald M.R., **Ehrenfeld J.M.**, Powell M., Jahangir A.A., Obremskey W.T., Sethi M.K. “Ankle Radiographs in the Early Postoperative Period. Do They Matter?” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
 74. McDonald M.R., **Ehrenfeld J.M.**, Powell M., Jahangir A.A., Ehrenfeld J.M., Obremskey W.T., Sethi M.K. “Predictive Factors of Hospital Length of Stay in Patients with Surgically Treated Ankle Fractures.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
 75. Powell M., Moore D.C., Jahangir A.A., **Ehrenfeld J.M.**, Obremskey W.T., Sethi M.K., “The Orthopaedic Trauma Surgeon, Gun Violence, and the Classroom: A Model for Community Action.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
 76. Sathiyakumar V., Porter J.J., Ajayi A., Obremskey W.T., **Ehrenfeld J.M.**, Powell M., Jahangir A.A., Sethi M.K. “The Homeless Orthopaedic Trauma Patient: Issues with Follow-Up.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
 77. Yoneda Z.T., Jahangir A.A., **Ehrenfeld J.M.**, Powell M., Obremskey W.T., Sethi M.K., “The Relationship between Length of Stay and ASA Physical Status in the Surgical Treatment of the Orthopaedic Trauma Patient.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/12.
 78. Gebre-Amlak, K.D., Weavind, L., **Ehrenfeld, J.M.** “Determination of Preoperative and Intraoperative Predictors of Post-Operative Deterioration” International Anesthesia Research Society Annual Meeting, Boston, MA, 5/12.
 79. Stol, I., Sandberg, W.S. **Ehrenfeld, J.M.** “AIMS Use is Associated with Increased SCIP Performance” International Anesthesia Research Society Annual Meeting, Boston, MA, 5/12.
 80. Stol, I., Sandberg, W.S. **Ehrenfeld, J.M.** “U.S. Adoption of AIMS: A Nationally Representative Survey” International Anesthesia Research Society Annual Meeting, Boston, MA, 5/12.
 81. Sethi, M., Moore, D., Yoneda, Z., Jahangir, A., **Ehrenfeld, J.M.**, Obremskey. “Gunshot victims at a Major Level 1 Trauma Center: a retrospective cohort study,” American Orthopaedic Association, Washington, DC, 6/12.
 82. Gebre-Amlak, K., Eldridge, C., **Ehrenfeld, J.M.** “Using Large Datasets to Determine Intraoperative Predictors of Post-Operative Deterioration” Meaningful Use of Complex Medical Data Symposium, Los Angeles, CA, 8/12.
 83. Marolen, K.M., Sandberg, W.S., **Ehrenfeld, J.M.** “Vanderbilt Perioperative Data Systems Research: Leveraging a Data Warehouse To Support Innovations In Clinical Research” Meaningful Use of Complex Medical Data Symposium, Los Angeles, CA, 8/12.
 84. Chester, S., **Ehrenfeld, J.M.**, Eckstrand, K.L. “A Report of LGBT Physician, Employee and Trainee Experiences at an Academic Medical Center,” Gay and Lesbian Medical Association Meeting, San Francisco, CA, 9/12.
 85. **Ehrenfeld, J.M.**, Daniels, T., Eckstrand, K.L. “Creation of an LGBTI Competent Provider Directory,” Gay and Lesbian Medical Association Meeting, San Francisco, CA, 9/12.

86. Peebles, K., Eckstrand, K.L., **Ehrenfeld, J.M.** “Using Natural Language Processing to Identify LGBT Patients in the Vanderbilt University Medical Center Electronic Medical Record,” Gay and Lesbian Medical Association Meeting, San Francisco, CA, 9/12.
87. Alamanda, V.K., Archer, K.R., Mathis, S., **Ehrenfeld, J.M.**, Halpern, J.L., Schwartz, H.S., Holt, G.E. “The financial burden of re-excising incompletely excised sarcomas – a cost analysis” Musculoskeletal Tumor Society Annual Meeting, Tampa, FL, 9/12
88. Hester, D., McGrane, S., **Ehrenfeld, J.M.**, Higgins, M. “Seeking Competency: The Use of Difficult Airway Tools During Residency in an Anesthesia Information Management System.” Society of Airway Management Annual Meeting. Toronto, Canada. 9/12.
89. Alvis, B., Hester, D., **Ehrenfeld, J.M.**, McGrane, S., Higgins, M. “Seeking Competency: Incidence of Traumatic Intubations by Month of Resident Training.” Society of Airway Management Annual Meeting. Toronto, Canada. 9/12.
90. Watson, D., Hester, D., McGrane, S., **Ehrenfeld, J.M.**, Higgins, M. “Seeking Competency: Incidence of Traumatic Intubations by Year of Resident Training.” Society of Airway Management Annual Meeting. Toronto, Canada. 9/12.
91. McGrane, S., Hester, D., **Ehrenfeld, J.M.**, Higgins, M. “Seeking Competency: Identifying Progression of Direct Laryngoscopy Skills during Residency Using an Anesthesia Information Management System.” Society of Airway Management Annual Meeting. Toronto, Canada. 9/12.
92. Moore, D.C., Apfeld J., Yoneda, Z.T., Powell M., Howard D.L., Jahangir, A.A., Archer, K.R., **Ehrenfeld, J.M.**, Obremskey, W.T.; Sethi, M.K. “Gunshot victims at a Major Level 1 Trauma Center: a retrospective cohort study of 343,866 Emergency Department Visits.” National Health Disparities Conference, Pittsburgh, PA. 10/12
93. McDonald, M.R., **Ehrenfeld, J.M.**, Marolen, K.N., Jahangir, A.A., Obremskey, W.T., Sethi, M.K. “Predictive Factors of Hospital Length of Stay in Patients with Surgically Treated Ankle Fractures” Orthopedic Trauma Association Annual Meeting, Minneapolis, MN, 10/12.
94. Almanda, V.K., Kang, B., **Ehrenfeld, J.M.**, Obremskey, W.T., Yoneda, Z., Sethi, M.K., Jahangir, A.A. “The Orthopaedic Trauma Patient: Risk Factors influencing Follow up.” Orthopedic Trauma Association Annual Meeting, Minneapolis, MN, 10/12.
95. Yoneda, Z., Jahangir, A.A., **Ehrenfeld, J.M.**, Powell, M., Obremskey, W.T., Sethi, M.K. “The relationship between length of stay and ASA in the surgical treatment of the Orthopaedic trauma patient.” Orthopedic Trauma Association Annual Meeting, Minneapolis, MN, 10/12.
96. McClure, J., Armstrong, T., Jahangir, A.A., **Ehrenfeld, J.M.**, Obremsky, W.T., Marolen, K.N., Sethi, M.K. “Do Open Fractures Influence Postoperative Length Of Stay? A Retrospective Review of Isolated Femur and Tibia Fractures At a Level 1 Center.” Orthopedic Trauma Association Annual Meeting, Minneapolis, MN, 10/12.
97. Sathiyakumar, V., Porter, J.J., Ajayi, A., Obremskey, W.T., **Ehrenfeld, J.M.**, Powell, M. Jahangir, A.A, Sethi, M.K. “The Homeless Orthopaedic Trauma Patient: Issues With Follow-Up” Orthopedic Trauma Association Annual Meeting, Minneapolis, MN, 10/12.
98. Hemachandra, L., Kla, K., Rothman, B., **Ehrenfeld, J.M.**, Sandberg, W.S. Analyzing the Need for Dedicated Trauma Rooms: A Data-Driven Modeling Approach. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.

99. Hester, D., Wanderer, J.P., **Ehrenfeld, J.M.** Development of a Methodology for Identification of Cost Variation Among Anesthesia Providers. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
100. Matthews, L., Kla, K., Marolen, K., **Ehrenfeld, J.M.** Predictors of Delayed First Case Starts in Operating Rooms. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
101. Musee, J., Daves, S.M., Snyder, D., **Ehrenfeld, J.M.** Incidence of Hypoxemia During Pediatric Surgery. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
102. **Ehrenfeld, J.M.**, Chen, J., Cassedy, E., Sandberg, W.S. A Survey of Modified Rapid Sequence Induction and Intubation in Canadian Academic Centers. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
103. Marolen, K.N., Anders, S., Rothman, B., **Ehrenfeld, J.M.** Using a Clinical Information System to Examine Perceived Intraoperative Efficiency. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
104. Iversen, T.B., Anderson, K.A., Marolen, K.N., Seim, A.R., **Ehrenfeld, J.M.** Impact of Determinants of a Good Day in the Operating Room. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
105. Marolen, K., **Ehrenfeld, J.M.**, Sandberg, E.H., Sandberg, W.S. Influence of Patient Behavior on Provider Communication During Pre-Anesthetic Consultations. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
106. Ye, I., Ampah, S., Ray, I., **Ehrenfeld, J.M.**, Weinger, M.B. Perioperative Factors, Length of Stay, and Costs Associated With Immediate and Delayed Postoperative Endotracheal Extubation. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
107. **Ehrenfeld, J.M.**, McCarty, K.L., Denton, J., Rothman, B.R., Peterfreund, R. Impact of an Intraoperative Diabetes Notification System on Perioperative Outcomes. American Society of Anesthesiologists Annual Meeting, Washington, D.C., 10/12.
108. Moore, D.C., Yoneda, Z.T., Jahangir, A.A., Archer, K.R., **Ehrenfeld, J.M.**, Obremskey, W.T.; Sethi, M.K. "Gunshot victims at a Major Level 1 Trauma Center: a retrospective cohort study of 343,866 Emergency Department Visits." American Orthopaedic Association Annual Meeting, Washington, DC. 10/12
109. Hill, J.B. , Sexton, K.W., Del Corral, G.A., Patel, A., Guillaumondegui, O.D., **Ehrenfeld, J.M.**, Shack, R.B. "The Clinical Role of Intraoperative Core Temperature In Free Tissue Transfer" American Society of Plastic Surgeon's Annual Meeting, New Orleans, LA 10/12.
110. Ekon, M., **Ehrenfeld, J.M.** "Computer Assisted Simulation of Evaluation Pairings to Facilitate 360 Degree Provider Evaluations" American Medical Informatics Association 2012 Annual Symposium, Chicago, IL 11/12.
111. Hill, J., Sexton, K.W., Summitt, J., Del Corral, G.A., **Ehrenfeld, J.M.**, Gunter, O.L., Shack, R.B., Guillaumondegui, O.D. "An Interdisciplinary Effort To Define An Evidence-Based Approach To Preoperative Resuscitation In Traumatic Microsurgical Reconstruction" Academic Surgical Congress, New Orleans, LA 2/13

112. McDonald, M., **Ehrenfeld, J.M.**, Jahangir, A.A., Obremsky, W.T., Sethi, M.K. “Ankle Radiographs in the Early Postoperative Period: Do they Matter?” American Academy of Orthopedic Surgeons Annual Meeting ,Chicago, IL 3/13.
113. Yoneda, Z., Jahangir, A.A., **Ehrenfeld, J.M.**, Powell, M., Obremsky, W.T., Sethi, M.K. “Length of Stay and American Society of Anesthesiologists (ASA) Status in the Orthopaedic Trauma Patient.” American Academy of Orthopedic Surgeons Annual Meeting ,Chicago, IL 3/13.
114. Alamanda, V., Archer, K., Mathis, S., **Ehrenfeld, J.M.**, Halpern, J.L., Schwartz, H.S., Holt, G.E. “The Financial Burden of Re-excising Incompletely Excised Sarcomas - A Cost Analysis.” American Academy of Orthopedic Surgeons Annual Meeting ,Chicago, IL 3/13.
115. Alamanda, V., Kang, B., **Ehrenfeld, J.M.**, Obremsky, W.T., Yoneda, Z., Sethi, M.K., Jahangir, A.A. “The Orthopaedic Trauma Patient: Risk Factors Influencing Follow Up.” American Academy of Orthopedic Surgeons Annual Meeting, Chicago, IL 3/13.
116. Hooe B.S, Sathiyakumar V., Apfeld J.C., Lee Y.M., Sutton D., **Ehrenfeld J.M.**, Obremsky W.T., Sethi M.K. “Geriatric Hip Fractures and Intra-Hospital Testing: Predicting Costs Utilizing the ASA Score.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/13.
117. Ihejirika R.C., Sathiyakumar V., **Ehrenfeld J.M.**, Lee Y.M., Apfeld J.C., Obremsky W.T., Sethi M.K. “An Assessment of the Inter-rater Reliability of the ASA Physical Status Score in the Orthopaedic Trauma Population.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/13.
118. Kay H., Sathiyakumar V., Garcia A.E., Yang G., Hooe, B.S., Considine P., **Ehrenfeld J.M.**, Obremsky W.T., Sethi M.K. “Fractures of Tibia and Femur, and 90-Day Readmission: Is There a Difference?” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/13.
119. Kay H., Sathiyakumar V., Ihejirika R.C., Garcia A.E., Onuoha II G., Lee Y.M., **Ehrenfeld J.M.**, Obremsky W.T., Sethi M.K. “The ASA Score as a Predictive Tool for Perioperative Transfusion in Trauma.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/13.
120. Kay H., Sathiyakumar V., Yengo-Kahn, A., Cowley R.A., Lee Y.M., **Ehrenfeld J.M.**, Obremsky W.T., Sethi M.K. “The ASA Score as a Predictor of 90-Day Perioperative Readmission in Patients with Isolated Orthopedic Trauma Injuries.” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/13.
121. Kay H., Sathiyakumar V., Lee Y.M., Apfeld J.C., **Ehrenfeld J.M.**, Obremsky W.T., Sethi M.K. “Do Holidays Influence Hospital Post-Operative Length of Stay in Orthopaedic Trauma?” Vanderbilt University Medical Center 30th Annual Research Forum, Nashville, TN 4/13.
122. Dageforde, L., Petersen, A., Harms, K., Feurer, I.D., **Ehrenfeld, J.M.**, Cavanaugh, K.L., Moore, D.E. “Reduced Health Literacy in Kidney Transplant Recipients May Be Associated with Difficulty Identifying a Live Kidney Donor.” American Transplant Congress, Seattle, WA. 5/13.

123. Marolen, K.N., Sandberg, W.S., **Ehrenfeld, J.M.** “Evaluation of a Computerized Preanesthetic Assessment Tool in Determining Perioperative Risk.” International Anesthesia Research Society Annual Meeting, San Diego, CA. 5/13.
124. House, L.M., Marolen, K.N., St Jacques, P., **Ehrenfeld, J.M.** “Identification of Perioperative Myocardial Infarction Through Database Scanning.” International Anesthesia Research Society Annual Meeting, San Diego, CA. 5/13.
125. Hooe B.S., Sathiyakumar V., Apfeld J.C., Lee Y.M., Sutton D., **Ehrenfeld J.M.**, Obremskey W.T., Sethi M.K. “Geriatric Hip Fractures and Intra-Hospital Testing: Predicting Costs Utilizing the ASA Score.” National Medical Association Annual Meeting, Toronto, Canada 6/13.
126. McKenna, J.W., Wilson, L.D., Humble, S.S., Guillaumondegui, O., Pandharipande, P., Song, Y., Davidson, M.A, **Ehrenfeld, J.M.**, Patel, M.B., “Predictors and Outcomes of Tracheostomy After Traumatic Brain Injury.” Neurotrauma 2013 Symposium, Nashville, TN. 8/13.
127. McDonald, M.R., Bulka, C.M., **Ehrenfeld J.M.**, Jahangir A.A., Sathiyakumar V., Apfeld J.C., Obremskey W.T., Sethi M.K. “Ankle Radiographs in the Early Postoperative Period: Do They Matter?” Orthopedic Trauma Association Annual Meeting, Phoenix, AZ. 10/13.
128. Sathiyakumar V., Apfeld J.C., Lee Y.M., Sutton D., **Ehrenfeld J.M.**, Hooe B.S., Obremskey W.T., Sethi M.K. “Geriatric Hip Fractures and Intra-Hospital Testing: Predicting Costs Utilizing the ASA Score.” Orthopedic Trauma Association Annual Meeting, Phoenix, AZ. 10/13.
129. **Ehrenfeld J.M.**, Shane Selig, Martin B.J., Dmochowski R.R., Bulka C.M., “Risk Factors for Postoperative Pneumonia: A Retrospective Analysis.” American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
130. Tiwari V., **Ehrenfeld J.M.**, Sandberg W.S. “Evaluating Improvements in First-Case-On-Time-Starts Using Process Control Methodologies.” American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
131. Wanderer J.P., Hester D.L., Sandberg W.S., Anderson-Dam J., **Ehrenfeld J.M.** “Identification of Factors Influencing Anesthetic Drug Cost Variation.” American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
132. Epstein R.H., **Ehrenfeld J.M.**, Rothman B.S., Sandberg W.S., Dexter F. “Lack of Utility of a Decision Support System to Mitigate Delays in Admission From the Operating Room to the Post Anesthesia Care Unit.” American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
133. Epstein R.H., Stockin M., St. Jacques, P., **Ehrenfeld J.M.**, Rothman B.S., Denny J.C. “Automated Identification of Drug Allergies Entered in Anesthesia Information Management Systems Using Non-Standard Terminology.” American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
134. Snyder D.T., **Ehrenfeld J.M.**, Furman W.R. “Development and Implementation of a Faculty Peer Evaluation System as Part of Ongoing Professional Practice Evaluation.” American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
135. Stol I.S., Epstein, R.H., **Ehrenfeld J.M.** “Current Adoption of Anesthesia Information Management Systems by Academic Anesthesia Departments in the United States.” American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13

136. **Ehrenfeld J.M.**, Marolen K.N., Shotwell M., Denton J., Sandberg W.S., Jering, M. "Utilization of the Surgical Apgar Score as a Continuous Measure of Intraoperative Risk." American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
137. Lilot M., **Ehrenfeld J.M.**, Lee C., Cannesson M., Rinehart J. "Exploration of Variability in Crystalloid Administration During Abdominal Surgery in Two Academic Medical Centers." American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
138. Jenkins D.N., Hayes R.M., Wanderer J.P., Dmochowski R.R., M.D., **Ehrenfeld J.M.** "Incidence of Postoperative Deterioration in a Cohort of 35,090 Surgical Patients." American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
139. Stapelfeldt W.H., **Ehrenfeld J.M.**, Bromley P., Dalton J., Reynolds M., Ghosh, B. "A Novel Risk Index for Adverse Postoperative Outcome: Validation and Dependence Upon High-Fidelity Intraoperative Blood Pressure Information." American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
140. Starr, S.A., **Ehrenfeld J.M.**, Baysinger C.L., Marolen K.N., Sandberg, W.S. "Initiation of a Nitrous Oxide Service: Implications for Patient Access to Obstetric Anesthesia Services." American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
141. Wanderer J.P., **Ehrenfeld J.M.**, Sandberg W.S., Epstein R.H. "The Changing Scope of Difficult Airway Management." American Society of Anesthesiologists Annual Meeting, San Francisco, CA. 10/13
142. Sathiyakumar V., Yengo-Kah, A., Kay H., Cowley R., Lee Y., **Ehrenfeld J.M.**, Obremsky W., Sethi M. "Utilizing the ASA Score as a Predictor of 90-Day Perioperative Readmission in Patients with Isolated Orthopedic Trauma Injuries." Orthopedic Trauma Association Annual Meeting, Phoenix, AZ. 10/13.
143. Kumar, A., Shotwell, M., Shi, Y., **Ehrenfeld, J.M.** "Acute kidney injury following subarachnoid hemorrhage – incidence, risk factors and outcomes." Society for Critical Care Medicine Critical Care Congress, San Francisco, CA. 1/14.
144. Jennings, S.T., Wanderer, J.P., **Ehrenfeld, J.M.** "Preoperative Type and Screen Testing for Elective Surgery: Using a Data Warehouse to Identify Workflow Process Errors." Society for Technology in Anesthesia Annual Meeting, Orlando, FL. 1/14
145. Selig, S.C. Johnson, M., Wanderer, J.P., **Ehrenfeld, J.M.** " Development of a Student-Faculty Matching Algorithm for Preceptorship Placement." Society for Technology in Anesthesia Annual Meeting, Orlando, FL. 1/14
146. **Ehrenfeld, J.M.**, Hebert, M., Hester, D. "Criteria for Airway Difficulty Classification: A Survey of Clinical Practice in the U.S. and Canada." Society for Technology in Anesthesia Annual Meeting, Orlando, FL. 1/14
147. Thompson, B., **Ehrenfeld, J.M.**, McEvoy, M.D., Wanderer, J.P. "An Automated Case Cancellation Review System For Enhancing Systems-Based Practice In Anesthesia Residency Training." Society for Technology in Anesthesia Annual Meeting, Orlando, FL. 1/14
148. Shinall, M.C., **Ehrenfeld, J.M.**, Guillamondegui, O.D. "Religious Patients in the ICU Receive More Aggressive End-of-Life Care with No Improvements in Survival." Academic Surgical Caucus Meeting, San Diego, CA. 2/14.

149. Baucom, R.B., Phillips, S.E., **Ehrenfeld, J.M.**, Holzman, M.D., Martin, B.J., Nealon, W.H., Sharp, K.W., Kaiser, J.L., Poulouse, B.K. “Defining Intraoperative Hypothermia: The Effect of Temperature on Surgical Site Infection in Ventral Hernia Patients.” Academic Surgical Caucus Meeting, San Diego, CA. 2/14.
150. **Ehrenfeld, J.M.**, McEvoy, M.D., Wanderer, J.P., Furman, W.R., Snyder, D., Sandberg, W.S. “Creation Of A Near Real-Time Clinical Performance Feedback Tool To Assess Personal Clinical Effectiveness.” ACGME Annual Meeting, Washington, DC. 3/14
151. Thakore RV, Foxx A, Lang MF, Sathiyakumar V, Obremskey WT, Boyce RH, **Ehrenfeld JM**, Sethi MK. “Operative Intervention for Geriatric Hip Fracture: Does Type of Surgery Impact Length of Stay?” American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA. 3/14.
152. Kay HF, Sathiyakumar V, Cowley RA, Thakore RV, **Ehrenfeld JM**, Obremskey WT, Sethi MK. “ASA Score as a Predictor of 90-Day Readmission in Patients with Isolated Orthopaedic Trauma Injuries.” American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA. 3/14.
153. Kripalani, S., **Ehrenfeld, J.M.**, Sandberg, W.S., Shi, Y., Bulka, C.M., Schildcrout, J.S. “Low Health Literacy Predicts Outcomes after Surgery.” Society of General Internal Medicine Annual Meeting, San Diego, CA. 4/14.
154. Theobald, C., Russ, S., **Ehrenfeld, J.M.**, Kripalani, S. “Interhospital Transfers: Patient Characteristics and Outcomes.” Society of General Internal Medicine Annual Meeting, San Diego, CA. 4/14.
155. **Ehrenfeld, J.M.**, Green, J.K., McDonald, M.F., Ridinger, H.A., Lomis, K.D., Miller, B.M. “Development and Implementation of a Continuity Clinical Experience.” University of Michigan Medical Education Symposium, Ann Arbor, MI. 4/14.
156. Lopez, M.G., Epstein, R.H., **Ehrenfeld, J.M.**, Dexter, F. “Anesthesiologist Staffing Considerations Consequent To The Temporal Distribution Of Hypoxemic Episodes In The Post Anesthesia Care Unit.” International Anesthesia Research Society Meeting, Montreal, Canada. 5/14.
157. **Ehrenfeld, J.M.**, Wanderer, J.P., Furman, W.R., Snyder, D., McEvoy, M.D. “Development Of Clinical Performance Metrics For Residents.” International Anesthesia Research Society Meeting, Montreal, Canada. 5/14.
158. McEvoy, M.D., Newton, M.W., **Ehrenfeld, J.M.**, Wanderer, J.P., Higgins, M., McQueen, K.A., Sandberg, W.S. “Comparison Of Anesthesia Training Experience At A Rural Referral Hospital In Western Kenya To An ACGME-Approved Program In The United States.” International Anesthesia Research Society Meeting, Montreal, Canada. 5/14.
159. Kumar, A.B., Shotwell, M., Shi, Y., Richards, J., **Ehrenfeld, J.M.** “Maximum Daily Sodium Is A Predictor Of Acute Kidney Injury In Patients Following Subarachnoid Hemorrhage.” International Anesthesia Research Society Meeting, Montreal, Canada. 5/14
160. Wanderer, J.P., Jennings, S.T., **Ehrenfeld, J.M.**, McEvoy, M.D. “Quantification Of Variability In Anesthesia Residency Airway Training.” International Anesthesia Research Society Meeting, Montreal, Canada. 5/14.

161. **Ehrenfeld, J.M.**, Wanderer, J.P., Sain, L.M., Geiger, T.M., Guillamondegui, O., Dmochowski, R., McEvoy, M.D. "Development Of A Colorectal Surgery Reporting Tool: The No Bugs Dashboard." International Anesthesia Research Society Meeting, Montreal, Canada. 5/14.
162. **Ehrenfeld, J.M.**, Green, J.K., McDonald, M.F., Ridinger, H.A., McAbee, C.D., Hutchinson, M., Lomis, K. "Continuity Clinical Experience: Implementation of a Longitudinal Student Experience." 2014 AAMC Integrating Quality Meeting, Rosemont, IL. 6/14.
163. Dagoberto, E., Thakore, R., Sathiyakumar, V., Ihejirika, R.C., Garcia, A.E., Onuoha, G., Lee, Y.M., **Ehrenfeld, J.M.**, Obremsky, W.T., Sethi, M.K. "The ASA Score As A Valuable Predictive Tool To Optimize Preoperative Blood Ordering For Orthopaedic Trauma." ACS NSQIP National Conference, New York, NY. 7/14.
164. Singer, B., Eckstrand, K., Edmiston, E.K., **Ehrenfeld, J.M.** "Transgender Health and Advocacy in Academic Medicine: An Empowerment Model." GLMA 2014 Annual Meeting, Atlanta, GA. 9/14.
165. Eckstrand, K.L., **Ehrenfeld, J.M.**, Forssell, S., Warren, B., Yehia, B., "Using Change Management to Improve LGBT Health in Academic Medicine." GLMA 2014 Annual Meeting, Atlanta, GA. 9/14.
166. Ousley, J. Baucom, R.B., Holzman, M.D., **Ehrenfeld, J.M.**, Sharp, K.W., Nealon, W.H., Poulouse, B.K. "History of MRSA Infection Considerably Increases Risk of Surgical Site Infection in Ventral Hernia Repair." American College of Surgeons 2014 Clinical Congress, San Francisco, CA. 10/14.
167. Benvenuti MA, Thakore RV, Francois EL, Siuta MA, Smith AK, Nwosu SK, Archer K, **Ehrenfeld JM**, Obremsky WT, Sethi MK. "The Gustilo-Anderson Classification System as Predictor of Non Union and Infection in Open Tibia Fractures." Orthopaedic Trauma Association, Tampa, FL. 10/14.
168. Sathiyakumar V, Thakore RV, Francois EL, Siuta MA, Benvenuti MA, Smith AK, **Ehrenfeld JM**, Evans JM, Obremsky WT, Sethi MK. "Open distal tibial shaft fractures: a prospective comparison of medial plate versus nail fixation." Orthopaedic Trauma Association, Tampa, FL. 10/14.
169. Mitchell PM, Corrigan CM, Patel NA, Silverberg AJ, Thakore RV, Obremsky WT, **Ehrenfeld JM**, Sethi MK. Evans JM. "13-year Experience in External Fixation of the Pelvis: Complications, Reduction, and Removal." Orthopaedic Trauma Association, Tampa, FL. 10/14.
170. Joyce D, Bulka CM, Thakore RV, Buntin M, Obremsky WT, **Ehrenfeld JM**, Sethi MK. "Geographic Variations in Orthopedic Trauma Billing and Reimbursements for Pelvis, Acetabular and Hip Fractures in the Medicare Population." Orthopaedic Trauma Association, Tampa, FL. 10/14.
171. Kay H, Sathiyakumar V, Ihejirika RC, Garcia AE, Onuoha II G, Lee YM, **Ehrenfeld JM**, Obremsky WT, Sethi MK. "The ASA Score as a Predictive Tool for Perioperative Transfusion in Trauma." Orthopaedic Trauma Association, Tampa, FL. 10/14.
172. Wanderer, JP, **Ehrenfeld, JM**, Epstein, RH, Kor, DJ, Fernandez-Bustamante, A., Jameson, LC, Pittet, JF, Vidal-Melo, MF, Bartz, RR, Blum, JM. "Current National Practice Patterns for Intraoperative Ventilation." American Society of Anesthesiologists Annual Meeting, New Orleans, LA. 10/14.

173. **Ehrenfeld, JM**, Shotwell, M, Gupta, RK, Sandberg, WS, Johnson MJ, Bulka, CM. "Regional Anesthesia, Time to Hospital Discharge, and In-Hospital Mortality: A Propensity Score Matched Analysis." American Society of Anesthesiologists Annual Meeting, New Orleans, LA. 10/14.
174. Hagaman, DH, **Ehrenfeld, JM**, Kunic, RJ, Starmer, J., Wanderer, JP. "An Intervention to Reduce Inappropriatepreoperative Chest X-ray Ordering Is Associated With Reductions in Otherpreoperative Testing." American Society of Anesthesiologists Annual Meeting, New Orleans, LA. 10/14.
175. Gruss, C., **Ehrenfeld, JM**, Kunic, R., Wanderer, JP. "Virtual Neck Circumference Measurements Can Be Used for Preoperative STOP-BANG Assessment." American Society of Anesthesiologists Annual Meeting, New Orleans, LA. 10/14.
176. Woolard, A, **Ehrenfeld, JM**, Eagle, SS, Wanderer, JP. "An Observational Study of Perioperative Antiplatelet Management in Patients with Coronary Stents." American Society of Anesthesiologists Annual Meeting, New Orleans, LA. 10/14.
177. Wanderer, JP, Shi, Y, Schildcrout, JS, **Ehrenfeld, JM**, Epstein, RH. "Supervising Anesthesiologists Cannot Be Reliably Evaluated According to their Patients' PACU Admission Pain Scores. " American Society of Anesthesiologists Annual Meeting, New Orleans, LA. 10/14.
178. Stapelfeldt, WH, Vuong, P, Yuan, H, Paul, CA, Cywinski, JB, **Ehrenfeld, JM**, Ghosh, B, Reynolds, MR. "The SLUScore™: A Novel Method to Quantify the Adverse Impact of Intraoperative Hypotension on Patient Outcome Following Non-Cardiac Surgery." American Society of Anesthesiologists Annual Meeting, New Orleans, LA. 10/14.
179. Westrick AC, Pinto VP, Alvarado A, **Ehrenfeld JM**, Le T, Wellons JC, Shannon CN. "Multidisciplinary Treatment of Severe Pediatric Traumatic Brain Injury: Predictors of Increased Resource Utilization." American Association of Neurological Surgeons / Congress of Neurosurgeons Pediatric Section Annual Meeting, Seattle, WA. 12/2014.
180. Wanderer, J.P., Tabing, A., **Ehrenfeld, J.M.** "Use of an Automated Cost Calculator to Quantify Anesthetic Cost Interventions." Society for Technology in Anesthesia Annual Meeting, Phoenix, AZ. 1/15.
181. Wanderer, J.P., Fowler, L.C., Reed, S., **Ehrenfeld, J.M.** "Automated Decision Support for Anesthesia Provider Relief: An Initial Survey and Implementation Report." Society for Technology in Anesthesia Annual Meeting, Phoenix, AZ. 1/15.
182. Kummerow, K.L., Phillips, S., Hayes, R.M., **Ehrenfeld, J.M.**, Holzman, M.D., Sharp, K., Pierce, R., Nealon, W., Poulouse, B.K. "Insurance Status Influences Emergent Transfer Designation in Emergency Surgical Transfers." Academic Surgical Congress Annual Meeting, Las Vegas, NV. 2/15.
183. Edwards, G.C., Goggins, K.M., **Ehrenfeld, J.M.**, Mir, H.R., Parikh, A.A., Merchant, N.B., Kripalani, S.B., Idrees, K. "Impact of Health Literacy on Post-Operative Outcomes in Patients Undergoing Major Abdominal Surgery." Academic Surgical Congress Annual Meeting, Las Vegas, NV. 2/15.
184. Thakore, RV, Francois, E.L., Siuta, M., Smith, A.K., Nwosu, S., Archer, K., **Ehrenfeld, J.M.**, Obremsky, W.T., Sethi, M.K. "The Gustilo-Anderson Classification System as Predictor of

- Nonunion and Infection in Open Tibia Fractures.” American Academy of Orthopaedic Surgeons 2015 Annual Meeting, Las Vegas, NV. 3/15.
185. Edwards, GC, Du, L., Miller, JR, **Ehrenfeld, JM**, Mir, HR, Shyr, Y, Parikh, AA, Merchant, NB, Idrees, K. “Timing, Incidence, And Risk Factors Associated With Unplanned Postoperative Hospital Readmissions In The Hepato-Pancreatico-Biliary Patients.” Americas Hepato-Pancreatico-Biliary Association Annual Meeting, Miami, FL. 3/15.
186. Starnes, JR, McEvoy, MD, **Ehrenfeld, JM**, Sandberg, WS, Wanderer, JP. "Automated Case Cancellation Review System Improves System Based Practice Learning." International Anesthesia Research Society Annual Meeting, Honolulu, HI. 3/15.
187. Fowler, LC, Wanderer, JP, Rothman, BS, **Ehrenfeld, JM**, McEvoy, MD. "Automated Ongoing Professional Performance Evaluation (Oppe) As Part Of A 360° Assessment Of The ACGME Core Competencies." International Anesthesia Research Society Annual Meeting, Honolulu, HI. 3/15.
188. McEvoy, MD, King, AB, Wanderer, JP, Geiger, T, Terekhov, M, **Ehrenfeld, JM**, Sandberg, WS. "Effect Of Implementing A Perioperative Surgical Home Including An Enhanced Recovery After Surgery Pathway For Colorectal Surgery Patients." International Anesthesia Research Society Annual Meeting, Honolulu, HI. 3/15.
189. Pettepher, C., Reimschisel, T., Atkinson, J., Fowler, M., Cutrer, W., **Ehrenfeld, J.M.**, Green, J.K., Lomis, K., Osherff, N. “Foundations of Medical Knowledge: A Competency-Based Horizontally and Vertically Integrated Pre-clerkship Curriculum for Medical Students.” Australian & New Zealand Association for Health Professional Educators / Asian Medical Education Association 2015 Conference, Newcastle, Australia. 3/15.
190. Pettepher, C., Reimschisel, T., Atkinson, J., Fowler, M., Cutrer, W., **Ehrenfeld, J.M.**, Green, J.K., Lomis, K., Osherff, N. “Foundations of Medical Knowledge: A Horizontally and Vertically Integrated Pre-clerkship Curriculum for Medical Students.” 2015 Canadian Conference on Medical Education, Vancouver, Canada. 4/15
191. Ridinger, H.A., Davidson, H.G., Green, J.K., Theobald, C.N., **Ehrenfeld, J.M.**, McAbee, C., Hutchinson, M., Miller, B. “Teaching Interprofessional Student Teams about Systems of Care through Collaborative Health Systems Assignments.” Southern Group on Educational Affairs Annual Meeting, Charlotte, NC. 4/15.
192. St. Jacques P, Chi M, Rothman BR, **Ehrenfeld JM**, Wanderer JP, Higgins M. “Reducing Serious Intraoperative Peripheral Intravenous Catheter Infiltrations.” Association of University Anesthesiologists Annual Meeting. Nashville, Tennessee. 4/15.
193. Terekhov MA, **Ehrenfeld JM**, Wanderer JP. “Surgical risk predictions are not meaningfully improved by including the intraoperative course: An analysis of the Risk Quantification Index and Present-on-admission Risk Models with the Surgical Apgar Score.” Association of University Anesthesiologists Annual Meeting. Nashville, Tennessee. 4/15.
194. Thakore RV, Foxx A, Shi H, Francois E, Prablek M, Nwosu S, Archer K, **Ehrenfeld JM**, Mir H, Obremsky WT, Sethi MK. “The Risk Factors and Costs of Surgical Site Infections at a Major Level I Trauma Center.” American Orthopaedic Association in Providence, RI. 6/15.
195. Terekhov, M, **Ehrenfeld, JM**, Guillaumondegui, O, Wanderer, JP. "Anesthesia Staff Breaks are Associated with a Reduction in Postoperative Adverse Outcomes" American Society of Anesthesiologists Annual Meeting, San Diego, CA. 10/15.

196. **Ehrenfeld, JM**, Wanderer, JP, Terekhov, M, Rothman, BS, Sandberg, WS. "The Impact of Perioperative Systems Design on Diabetic Patient Outcomes." American Society of Anesthesiologists Annual Meeting, San Diego, CA. 10/15.
197. Wanderer, JP, Gruss, C, **Ehrenfeld, JM**. "Using visual analytics to determine the utilization of preoperative anesthesia assessments." American Society of Anesthesiologists Annual Meeting, San Diego, CA. 10/15.
198. Johnson, D., Sathiyakumar, V., Greenberg, S., Thakore, R., **Ehrenfeld, J.M.**, Mir, H., Jahangir, A., Sethi, M., Obremesky, W.T. "Relationship between the Charlson Comorbidity Index and Cost of Treating Geriatric Hip Fractures: Implications for Bundled Payment" Orthopedic Trauma Association Meeting, San Diego, CA 10/15.
199. Wanderer, J.P., Blazer, H., Aline, F., McCarthy, K., King, A.B. **Ehrenfeld, J.M.** McEvoy, M.D. "Development of an Automated System for Tracking Bundle Compliance and Patient Outcomes for an Anesthesia Perioperative Consult Service." Society for Technology in Anesthesia Annual Meeting, West Palm Beach, FL 1/16.
200. Sponsler, K.C., Bradham, T.S., Lomis, K.D., **Ehrenfeld, J.M.** "Beyond Paint by Numbers: The Portrait for Quality Improvement & Patient Safety in Medical Education" AMA Accelerating Change in Medical Education Consortium Meeting, Hershey, PA 3/16.
201. Ridinger, H.A., Burgner, A., Theobald, C.N., Richmond, A., Green, J.K., Gelber, J.T., Miller, B.M., Bills, J.L., Young, G., **Ehrenfeld, J.M.** "Vanderbilt Interprofessional Collaborative Experience (VICE): An Interprofessional Standardized Patient Encounter" Southern Group on Educational Affairs Annual Meeting, Austin, TX 4/16.
202. Theobald, C.N., Ridinger, H.,A., **Ehrenfeld, J.M.** Hutchison, M., Green, J.K. "Effect of Medication Reconciliation Student Curriculum on Skill Acquisition & Patient Care" Southern Group on Educational Affairs Annual Meeting, Austin, TX 4/16.
203. Richardson, K., Shen, S., Gupta, D., Wells, Q., **Ehrenfeld, J.M.**, Wanderer, J.P. "Postoperative MI and Mortality Associated With Left Bundle Branch Block" American College of Cardiology Annual Meeting, Chicago, IL 4/16.
204. Theobald, C.N., Choma, N.N., **Ehrenfeld, J.M.**, Russ, S., Kripalani. S. "Effect of a Handover Sheet on Efficiency of Care and Mortality for Interhospital Transfers" Society for General Internal Medicine Annual Meeting, Hollywood, FL 5/16.
205. **Ehrenfeld, J.M.**, Sandberg, W.S., Terekhov, M., Shi, Y., Bulka, C.M., Schildcrout, J., Kripalani, S. "Low Health Literacy is a Predictor of Hospital Admission, Length of Stay and Other Hospital Quality Outcomes" Association of University Anesthesiologists Annual Meeting, San Francisco, CA 5/16.
206. **Ehrenfeld, J.M.**, Terekhov, M., Dmochowski, R.R., Martin, B.J., Hayes, R.M., Bulka, C.M. "Non-Depolarizing Neuromuscular Blocking Agents, Reversal & Risk of Postoperative Pneumonia" International Anesthesia Research Society Annual Meeting, San Francisco, CA 5/16.
207. Shi, H., Terekhov, M., **Ehrenfeld, J.M.**, McEvoy, M.D., King, A.B., Wanderer, J.P. "Implementation Of Clinical Care Pathways Is Associated With A Generalized Increase In The Use Of Non-Opioid Multimodal Analgesia" International Anesthesia Research Society Annual Meeting, San Francisco, CA 5/16.

208. Shi, H., Terekhov, M., **Ehrenfeld, J.M.**, Wanderer, J.P. “Significant Reduction In Preoperative Testing At A Preoperative Evaluation Clinic Is Not Associated With Increase In Day Of Surgery Testing Or Case Cancellations” International Anesthesia Research Society Annual Meeting, San Francisco, CA 5/16.
209. Bradham T., Sponsler, K., **Ehrenfeld, J.M.** “Medical Student Training in Patient Safety: Practice-based Learning and Improvement” AAMC Integrating Quality Meeting, Chicago, IL 6/16.
210. Bradham T., Sponsler, K., **Ehrenfeld, J.M.** “Medical Student Training in Quality Improvement: Practice-based Learning and Improvement” AAMC Integrating Quality Meeting, Chicago, IL 6/16.
211. Beach, L., Monahan, S., **Ehrenfeld, J.M.** Development of a Natural Language Processing Algorithm to Identify Transgender Patients in the Vanderbilt University Medical Center Electronic Health Records System” GLMA Annual Meeting, St. Louis, IL 9/16.
212. Bhutiani, M., **Ehrenfeld, J.M.**, McEvoy, M.D., Fowler, L., Wanderer, J.P. “Novel Decision Support Tool Improves Real and Perceived Resident Relief Equity.” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/16.
213. Gruss, C., **Ehrenfeld, J.M.**, McEvoy, M.D., Wanderer, J.P. “The Feasibility of Broad Utilization of the ACS NSQIP Surgical Risk Calculator in an Academic Medical Center.” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/16.
214. Shaffer, B.K., **Ehrenfeld, J.M.**, Wanderer, J.P. “Validation of the LACE Readmission and Mortality Prediction Model in a Large Surgical Cohort.” American Society of Anesthesiologists Annual Meeting, Chicago, IL 10/16.
215. Fowler, L.L., **Ehrenfeld, J.M.**, McEvoy, M. “A Pilot Study to Assess the Feasibility of a Smartphone Application for Asynchronous Workplace-Based Learning.” Association of University Anesthesiologists Annual Meeting, Washington, DC 5/17.
216. Wanderer, J.P., Fowler, L.L., **Ehrenfeld, J.M.**, Kappen, T., Sandberg, W.S., McEvoy, M. “Automated Feedback System Improves Perioperative Outcome Awareness.” Association of University Anesthesiologists Annual Meeting, Washington, DC 5/17.
217. Qiu, Y., **Ehrenfeld, J.M.**, Wanderer, J.P. “Evaluating the 30-day Surgical Mortality Metric's Integrity with a National Sample.” International Anesthesia Research Society Annual Meeting, Washington, DC 5/17.
218. Fowler, L.L., Ahmed, T., **Ehrenfeld, J.M.**, McEvoy, M., Robertson, A. “QuizTime: A Smartphone Application for Asynchronous, Work Based Learning.” International Anesthesia Research Society Annual Meeting, Washington, DC 5/17.
219. **Ehrenfeld, J.M.**, Fowler, L.L., Hickson, G., McEvoy, M., Webb, L. “VandyTalks: An Novel Intervention to Teach Anesthesiology Residents How To Address Difficult Situations by Speaking Up.” International Anesthesia Research Society Annual Meeting, Washington, DC 5/17.
220. Zimmerman, D., Robles, RJ, Churchwell, A.L., **Ehrenfeld, J.M.** “Trans Buddy: A Model Transgender Patient Navigator Program.” GLMA Annual Meeting, Philadelphia, PA 9/17.

221. Grant, B., Nelson, S., **Ehrenfeld, J.M.**, Wanderer, J.P. “Can Attending Anesthesiologists Be Effectively Compared Using Patient Satisfaction Rating.” International Anesthesia Research Society Annual Meeting, Chicago, IL 4/18.
222. Grant, B., Nelson, S., **Ehrenfeld, J.M.**, Wanderer, J.P. “Evaluation of Mobility Assessment Tools for Preoperative Assessment.” International Anesthesia Research Society Annual Meeting, Chicago, IL 4/18.
223. Ehrenfeld, J.M., Gonzales, G., Zimmerman, D.R. “Healthcare Utilization among Transgender Individuals in California” GLMA Annual Meeting, Las Vegas, NV 10/18. <accepted>

Other Non-Peer Reviewed Publications

1. **Ehrenfeld, J.M.** “Medical Student Debt: Shaping the Course of Our Profession” (2003) *Chicago Medicine* **106** (1) 11-12.
2. Silverstein, J.C., Croft, D., Dech, F., **Ehrenfeld, J.M.** “Novel Techniques for Anatomy Instruction” (2003) *Chicago Medicine* **106** (7) 20.
3. **Ehrenfeld, J.M.** “Increasing Resident Participation in Clinical Research” (2006) *American Society of Anesthesiologists Newsletter* **70** (9) 40.
4. **Ehrenfeld, J.M.** “Developing Leaders in Medicine” (2007) *Massachusetts Medical Society Residents’ Report*.
5. Sethi M.K., Aseltine, R.A., **Ehrenfeld, J.M.** “The Costs and Prevalence of Defensive Medicine in Massachusetts.” (2008) *Massachusetts Medical Society*.
6. **Ehrenfeld, J.M.** “A Guide to Anesthesia Information Management Systems” (2009) in *Anesthesiology News*, Sept 2009, Vol 35:9
7. **Ehrenfeld, J.M.** “Anesthesia Information Management Systems: Clinical and Operational Impact” (2010) in *Anesthesiology News*, August 2010, Vol 36:8.
8. **Ehrenfeld, J.M.**, Reardon, C., Tomei, K. “The Quality Improvement Project” (2013) in *Introduction to the Practice of Medicine*. American Medical Association.
9. **Ehrenfeld, J.M.**, “Quality Improvement in Anesthesiology” (2013) in *Introduction to the Practice of Medicine*. American Medical Association.
10. **Ehrenfeld, J.M.**, “The Storm Abroad: Anesthesiology During Wartime: Preparing for Battle: Anesthesia Training for Combat Missions” (2015) in *Anesthesiology News*, May 2015, Vol 41:5.
11. **Ehrenfeld, J.M.**, “The Storm Abroad: Anesthesiology During Wartime: Giving Blood on the Battlefield” (2015) in *Anesthesiology News*, October 2015, Vol 41:10.

Local Invited Presentations and Courses

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| 2/2006 | Leveraging an Automated Anesthesia Information Management/ Ten Minute Science Presentation
Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital |
| 8/2006 | Management of Double Lumen Endobronchial Tubes/ Case Conference Presentation
Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital |
| 6/2008 | Intraoperative Variables and Surgical Outcomes: An Apgar Score for Surgery/ Ten Minute Science Presentation
Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General |

- Hospital
- 8/2008 Process Monitoring and Control Utilizing An Automated Information Management System/ Ten Minute Science Presentation
Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital
- 5/2009 Anesthesia Informatics: Combining Research with Clinical Practice/ Panel Presentation
Harvard Medical School, Anesthesia Interest Group
- 2/2010 Anesthesia Informatics: The Ability to Impact Real-Time Processes of Care /
Departmental Grand Rounds
Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital
- 2/2010 Real-Time Decision Support in the Operating Room / Departmental Grand Rounds
Department of Surgery, Massachusetts General Hospital
- 3/2011 Providing Culturally Competent Care to Diverse Patient Populations / Invited Lecture,
Primary Care, Family Medicine, and LGBT Student Interest Group Annual Seminar,
Vanderbilt University School of Medicine
- 4/2011 Using Electronic Databases for Observational Research: Identifying, Approaching, and
Processing Data Sources / BH Robbins Monthly Seminar, Department of Anesthesiology,
Vanderbilt University School of Medicine
- 4/2011 Automated Alerting & Recommendations for Management of Patients with Pre-Existing
Hypoxia & Potential Acute Lung Injury: A Pilot Study / 7th Annual Anesthesiology
Research Retreat, Department of Anesthesiology, Vanderbilt University School of
Medicine
- 6/2011 Introduction to Clinical Research: Literature Searches, Hypothesis Generation, Obtaining
Pilot Data / Summer Research Lecture Series, Department of Anesthesiology, Vanderbilt
University School of Medicine
- 7/2011 Perioperative Data Acquisition for Clinical Research / Cooperative Human Tissue
Network Learning Exchange, Vanderbilt University
- 9/2011 Information Technology in Epidemiology / Epidemiology Quantitative Methods and
Measurement Course, Vanderbilt Institute for Medicine and Public Health
- 9/2011 Informatics and Clinical Research: Development and Validation of The Surgical Apgar
Score / Department of Anesthesiology Grand Rounds, Vanderbilt University School of
Medicine
- 10/2011 Optimizing Health for Diverse Patient Populations / Nursing 225, Vanderbilt University
School of Nursing
- 11/2011 Providing Culturally Competent Care to Diverse Patient Populations / Invited Lecture,
John E. Fyer Lecture Series, Vanderbilt University School of Medicine
- 2/2012 The Perioperative Data Systems Research Group: Supporting Departmental Quality &
Performance / Invited Lecture, Anesthesiology All Staff Meeting, Vanderbilt University
- 8/2012 Professional Conduct, Patients and The Use of Social Media: How to Stay Out of Trouble /
Invited Lecture, Department of Otolaryngology, Vanderbilt University
- 8/2012 Introduction to LGBTI Health: What Every Medical Student Needs to Know / Invited
Lecture, John E. Fyer Lecture Series, Vanderbilt University School of Medicine
- 9/2012 Caring for Diverse Populations / Vanderbilt University School of Nursing Faculty Summit
- 10/2012 Introduction to LGBTI Health / Department of Obstetrics & Gynecology, Vanderbilt
University
- 10/2012 Perioperative Information Management Systems: Driving Discovery & Reliability
In The Operating Room / Center for Clinical Improvement, Vanderbilt University

- 11/2012 Information Technology in Epidemiology / Epidemiology Quantitative Methods and Measurement Course, Vanderbilt Institute for Medicine and Public Health
- 11/2012 Introduction to LGBTI Health / Department of Pediatric Grand Rounds, Vanderbilt University
- 12/2012 Informatics and Communication in the Perioperative Environment / Effective Health Communication Program, Vanderbilt University
- 1/2013 Silent Voice: LGBTI Issues Amongst the Elderly Populations / The Lefkowitz Hour, Vanderbilt University School of Medicine
- 4/2013 HIMSS at Home: Approaches to Building a Perioperative Data Warehouse / Systems Support Services, Vanderbilt University Informatics Center
- 5/2013 Novel Approaches to Providing Automated Trainee Feedback / Vanderbilt Program Directors Forum, Vanderbilt University School of Medicine
- 6/2013 Introduction to Perioperative Clinical Decision Support / Department of Biomedical Informatics Summer Student Program, Vanderbilt University
- 6/2013 Introduction to Clinical Research / Department of Anesthesiology Summer Internship Program, Vanderbilt University
- 10/2013 Does physician assisted suicide constitute a breach of the Hippocratic Oath for the participating physician / Vanderbilt University School of Medicine
- 10/2013 Leadership Opportunities & The AMA: My Personal Journey / Vanderbilt University School of Medicine
- 11/2013 Staying Healthy: The Basics of Lesbian, Gay, Bisexual and Transgender Health / PFLAG-Franklin, TN
- 11/2013 Clinical Decision Support & The Management of Perioperative Diabetes: Driving Quality & Reliability in the Operating Room / Endocrinology Grand Rounds, Vanderbilt University School of Medicine
- 3/2014 Optimizing Health for Diverse Patient Populations / Nursing 225, Vanderbilt University School of Nursing
- 6/2014 Getting Started on a Research Project: Background Research, Hypothesis Generation, Pilot Data, Department of Anesthesiology Summer Internship Program, Vanderbilt University
- 6/2014 Introduction to Clinical Decision Support, Department of Biomedical Informatics Summer Internship Program, Vanderbilt University
- 7/2014 Mental Health Concerns for LGBTI Patients: Considerations Regarding Language and Documentation, Vanderbilt University Psychological Counseling Center
- 8/2014 Current Issues in Teaching About LGBTI Health, Vanderbilt University Health Sciences Education Grand Rounds
- 9/2015 Anesthesiology Informatics: Challenges and Opportunities, Vanderbilt Department of Biomedical Informatics Clinical Informatics Monthly Seminar
- 10/2015 Perspectives from the Frontlines: Informatics in Afghanistan, Vanderbilt Department of Biomedical Informatics Clinical Informatics Weekly Seminar
- 11/2015 HIV and the LGBT Community: Prevention and Advocacy, Vanderbilt Lambda Association HIV Awareness Week
- 11/2015 The Healthcare Needs of Veterans, Vanderbilt University School of Medicine
- 12/2015 Advocacy and Leadership: An Introduction. Vanderbilt Department of Anesthesiology Professional Development Rotation
- 12/2015 Diversity and LGBT Health for the Anesthesiologist. Vanderbilt Department of Anesthesiology Professional Development Rotation
- 1/2016 Caring for LGBTI Patients and Families / Nursing 225, Vanderbilt University School of Nursing

- 1/2016 The Needs of Transgender Pediatric Patients and Their Families, Monroe Carell Jr. Children's Hospital at Vanderbilt
- 1/2016 Operative Concerns for Transgender Pediatric Patients, Monroe Carell Jr. Children's Hospital at Vanderbilt
- 2/2016 Minority Stress and LGBT Health, Vanderbilt University School of Medicine Diversity Week
- 2/2016 Mental Health Needs of LGBT Patients and Families, Vanderbilt University Department of Psychiatry Grand Rounds
- 3/2016 Caring for the Social Needs of LGBTI Veterans and Families, Tennessee Valley Healthcare System (Nashville VA)
- 4/2016 Operative Concerns for Adult Transgender Patients, Vanderbilt University Hospital
- 5/2016 Interprofessional Care for LGBTI Patients / Nursing 6091, Vanderbilt University School of Nursing
- 8/2016 Identifying Resources for Educational Scholarship, Vanderbilt University School of Medicine Educator Development Program Scholars Program
- 8/2016 Caring for Elderly LGBT Patients, Vanderbilt University Palliative Care Grand Rounds
- 11/2016 The Unique Needs of Transgender Patients, Speech-Language Pathology Graduate Seminar, Vanderbilt University
- 12/2016 Anesthesia: Beyond the Operating Room, Vanderbilt Anesthesia Interest Group, Nashville, TN
- 1/2017 My Personal Journey to Advocacy, Vanderbilt Department of Anesthesiology, Nashville, TN
- 1/2017 Empower Patients and Families, Vanderbilt Department of Anesthesiology, Nashville, TN
- 1/2017 Leadership and Organized Medicine, Vanderbilt Department of Anesthesiology, Nashville, TN
- 1/2017 VandyTalks: Speaking Up, Vanderbilt Department of Anesthesiology, Nashville, TN
- 1/2017 Social Media: Protecting Your Reputation Online, Vanderbilt Department of Anesthesiology, Nashville, TN
- 2/2017 Caring for LGBT Patients, Vanderbilt University School of Medicine, Nashville, TN
- 3/2017 Unique Aspects of Health Care Settings, Vanderbilt University School of Medicine, Nashville, TN
- 4/2017 Caring for LGBT Patients, Vanderbilt University School of Medicine, Nashville, TN
- 6/2017 Introduction to Clinical Research, Vanderbilt University School of Medicine, Nashville, TN
- 7/2017 Mentorship and Success in Science, Technology, Engineering, and Mathematics. Aspironaut Distinguished Speaker Series, Vanderbilt University School of Medicine, Nashville, TN
- 8/2017 Health Care Information Systems, Vanderbilt University School of Medicine, Nashville, TN
- 9/2017 Perioperative Information Systems & Clinical Decision Support. Vanderbilt University School of Medicine, Nashville, TN
- 10/2017 Caring for LGBT Patients, Vanderbilt University School of Medicine, Nashville, TN
- 10/2017 Introduction to Health Policy, Vanderbilt University, Nashville, TN
- 11/2017 Securing and Managing Research Funding, Vanderbilt University, Nashville, TN
- 1/2018 Introduction to Physician Leadership Styles, Vanderbilt University, Nashville, TN
- 1/2018 Caring for LGBTQ Patients and Families, Vanderbilt University, Nashville, TN
- 1/2018 Situational Leadership for Physicians, Vanderbilt University, Nashville, TN
- 1/2018 Social Media: Managing Your Message and Staying Out of Trouble, Vanderbilt

University, Nashville, TN

1/2018 Venture Capital and Biotechnology Development, Vanderbilt University, Nashville, TN

1/2018 Quality, Reliability, and Augmented Intelligence, Vanderbilt University, Nashville, TN

Regional Invited Presentations and Courses

- 10/2008 Residency, Research and Medical Education: Looking Beyond Medical School/ Invited Lecture,
University of Massachusetts Medical School, Worcester, MA
- 4/2009 Principals in Airway Management/ Invited Lecture
Massachusetts Medical Society, Waltham, MA
- 11/2009 Combining Research and Medical Informatics: Anesthesia Career Options/ Invited Lecture
Boston University Medical School, Boston, MA
- 2/2010 Governance & Medical Policy: How to Have an Impact/ Invited Lecture
Massachusetts Medical Society, Waltham, MA
- 2/2010 Decision Making in the Operating Room/ Invited Lecture
Worcester Polytechnical Institute, Worcester MA
- 11/2010 Introduction to Advocacy and Policy Making Processes/ Invited Lecture
Massachusetts Medical Society, Waltham, MA
- 11/2011 Introduction to Advocacy and Policy Making Processes/ Invited Lecture
Massachusetts Medical Society, Waltham, MA
- 11/2012 Perioperative Care of the HIV Patient/ Invited Lecture
Vanderbilt HIV Symposium, Nashville TN
- 11/2012 FOCUS: A Discussion About LGBTI Health Issues / Invited Lecture
Meharry Medical College, Nashville TN
- 2/2013 Preoperative Pregnancy Testing and Evidence Based Medicine / Invited Lecture
Vanderbilt Department of Anesthesiology Grand Rounds, Nashville, TN
- 5/2013 Optimizing Health Communication For Patients and Perioperative Providers / Invited
Lecture, Vanderbilt Department of Anesthesiology Grand Rounds, Nashville, TN
- 5/2013 Primary Care for Lesbian, Gay, Bisexual, and Transgender Patients / Invited Lecture,
Tennessee Primary Care Association Annual Meeting, Nashville, TN
- 6/2012 Primary Care for Lesbian, Gay, Bisexual, and Transgender Patients / Invited Lecture,
Department of Veterans Affairs, Tennessee Valley Healthcare System, Nashville, TN
- 10/2013 Does Physician Assisted Suicide Constitute a Breach of the Hippocratic Oath for the
Participating Physician? / Invited Lecture, Vanderbilt University School of Medicine,
Nashville, TN
- 10/2013 Developing as a Leader: Practical Skills & Lessons Learned / Invited Lecture, Vanderbilt
University School of Medicine, Nashville, TN
- 1/2014 Advocating for Patients and Physicians / Panel Presentation, Vanderbilt University School
of Medicine, Nashville, TN
- 2/2014 Ending Invisibility: The Health Needs LGBTI Patients / Invited Lecture, University of
Tennessee Health Science Center, Memphis, TN
- 8/2015 Engaging the GLBTI Workforce: Transgender in the Workplace. Tennessee Society for
Healthcare Human Resources Administration, Brentwood, TN.
- 9/2015 The Challenges of The Meaningful Use Program, Massachusetts Medical Society EHR
Townhall, Boston, MA.
- 2/2016 Approaches to Caring for LGBTI Patients and Families, Belmont University School of
Nursing, Nashville, TN.
- 3/2016 The Mental Health Needs of LGBT Patients, Middle Tennessee Mental Health Institute,

- Nashville, TN
- 3/2016 Caring for LGBT Patients with Mental Illness, Middle Tennessee Mental Health Institute, Nashville, TN
- 9/2016 Ethical and Legal Considerations for LGBT Patients and Clients, Tennessee Bar Association, Nashville, TN.
- 9/2016 Sexual Orientation and Gender Identity: Best Practices for Data Collection, Tennessee Primary Care Association, Murfreesboro, TN.
- 9/2016 Disruptive Technology in Medicine, New England Health Executive Network, Boston, MA
- 10/2016 Transgender Issues in Employment, Lawyers Association for Women, Nashville, TN.
- 10/2016 Care of the LGBT Patient, Tennessee Nurses Association, Murfreesboro, TN
- 10/2016 Culturally Competent Care for LGBT Patients, Belmont University School of Nursing, Nashville, TN.
- 12/2016 An Update on HIV and LGBT Patients, Southeast Aids Education and Training Center Annual Meeting, Brentwood, TN
- 2/2017 Interprofessional Approaches to Teaching LGBT Care, Belmont University School of Nursing, Nashville, TN.
- 2/2017 What Every Physician Needs to Know about LGBT Health, Meharry Medical College, Nashville, TN
- 3/2017 Providing Care for LGBT Patients, Belmont University School of Nursing, Nashville, TN.
- 3/2017 Supporting the Sexual Health of LGBT Patients, Nashville Alliance for Sexual Health, Nashville, TN
- 10/2017 Cancer and the LGBT Community. Belmont University, Nashville, TN.
- 10/2017 Caring for LGBT Patients. Belmont University School of Nursing, Nashville, TN.
- 4/2018 Primary Care Needs of LGBT Patients. Tennessee Physician Assistant Association Annual Meeting, Franklin, TN.

National Invited Presentations and Courses

- 10/2005 Right vs. Left-Sided Double Lumen Tubes: Usage and Performance by Infrequent Users/ Podium Presentation-Science (*result of abstract submission / selection process*)
American Society of Anesthesiologists, Annual Meeting, Atlanta, GA
- 10/2006 Incidence of Intraoperative Gaps in Patient Monitoring During Anesthesia/ Podium Presentation-Science (*result of abstract submission / selection process*)
American Society of Anesthesiologists, Annual Meeting, Chicago, IL
- 6/2007 Basic Airway Management/ Invited Lecture
American Medical Association, Annual Meeting Chicago, IL
- 6/2008 Innovative Continuous Process Control in the Perioperative Setting/ Invited Lecture
University of Maryland, Baltimore, MD
- 6/2008 Basic Airway Management/ Invited Lecture
American Medical Association, Annual Meeting, Chicago, IL
- 10/2008 Association of Normothermia with an Elevated Risk-Adjusted Incidence of Surgical Site Infections/ Podium Presentation-Science (*result of abstract submission / selection process*)
American Society of Anesthesiologists, Annual Meeting, Orlando, FL
- 5/2008 Clinical Decision Support/ Session Moderator
Institute for Healthcare Improvement, Nashville, TN
- 3/2009 Utilization of an Anesthesia Information Management System for Physician Credentialing/ Invited Lecture (*result of abstract submission / selection process*)
Clinical Conference Coverage of the International Anesthesia Research Society Annual

- Meeting; San Diego, CA
- 6/2009 Basic Airway Management/ Invited Lecture
American Medical Association, Annual Meeting, Chicago, IL
- 10/2009 Development of an Anesthesia Department Intranet/ Panel Presentation
American Society of Anesthesiologists, Annual Meeting, New Orleans, LA
- 10/2009 AIMS-Based Credentialing Metrics Detect Practice Pattern Differences Among Anesthesia
Subspecialties / Podium Presentation-Science (*result of abstract submission / selection
process*)
American Society of Anesthesiologists, Annual Meeting, New Orleans, LA
- 10/2009 The Impact of Resident Length of Training on Surgical Wake-Up Time / Podium
Presentation-Science (*result of abstract submission / selection process*)
American Society of Anesthesiologists, Annual Meeting, New Orleans, LA
- 1/2010 Utilization of Anesthesia Information Management Systems Data to Satisfy the Joint
Commission Requirements for Ongoing Professional Practice Evaluations / Podium
Presentation-Science (*invited lecture*)
Society for Technology in Anesthesia, Annual Meeting, West Palm Beach, FL
- 10/2010 Prevention of Perioperative Positioning Related Injuries
American Society of Anesthesiologists, Annual Meeting, San Diego, CA (*result of
abstract submission / selection process*)
- 10/2010 The Hidden Incidence and Cost of Epidural Hematomas
American Society of Anesthesiologists, Annual Meeting, San Diego, CA (*result of
abstract submission / selection process*)
- 10/2010 AIMS: Utilizing Data to Improve Patient Care, Billing and Research
American Society of Anesthesiologists, Annual Meeting, San Diego, CA (*invited panelist*)
- 10/2010 Impact of Continuous and Noninvasive Hemoglobin Monitoring on Intraoperative Blood
Transfusions, American Society of Anesthesiologists, Annual Meeting, San Diego, CA
(*result of abstract submission / selection process*)
- 1/2011 Data Driven Safety: Are We Ready? (*invited lecture*)
Society for Technology in Anesthesia, Annual Meeting, Las Vegas, NV
- 1/2011 Impact of Perioperative Informatics on Quality and Safety
Tufts University School of Medicine (*invited lecture*)
- 3/2011 Reduction of Perioperative Positioning Injuries, Association of periOperative Registered
Nurses, Philadelphia, PA (*result of abstract submission / selection process*)
- 8/2011 Utilization of Anesthesia Information Management Systems to Drive Quality &
Innovation, Walter Reed Army Medical Center, Washington D.C. (*invited lecture*)
- 8/2011 Leveraging Anesthesia Information Management Systems to Provide High Quality Care,
Mayo Clinic Conference on Systems Engineering and Operations Research in Health Care,
Rochester, MN
- 10/2011 Improving Your Practice with Data from Anesthesia Information Management Systems,
American Society of Anesthesiologists Annual Meeting, Chicago, IL (*panel presentation*)
- 10/2011 Anesthesia Information Management Systems: Opportunities to Improve Quality &
Decrease Costs, Mayo Clinic, Jacksonville, FL (*invited lecture*)
- 10/2011 Using Data for Observational Research: A Primer for Resident. Mayo Clinic, Jacksonville,
FL (*invited lecture*)
- 2/2012 Anesthesia Information Management Systems: Increasing Quality and Decreasing Cost.
Michigan Society of Anesthesiologists Annual Meeting, Troy, MI (*invited lecture*)
- 6/2012 Driving LGBT Quality Improvement Across A Medical Center. American Medical
Association Annual Meeting, Chicago, IL (*invited lecture*)

- 7/2012 The Use of Intraoperative Data to Develop Advanced Predictive Models of Postoperative Risk. Johns Hopkins University, Baltimore, MD (*invited lecture*)
- 9/2012 Perioperative Clinical Decision Support: Bringing Reliability to the Operating Room. University of Texas at Houston (*invited lecture*)
- 9/2012 Innovation & Integration for LGBTI Curriculum in Medical School. Gay & Lesbian Medical Association Annual Meeting, San Francisco, CA (*invited lecture*)
- 10/2012 Existing Practices Regarding Sexual Orientation And Gender Identity Data Collection In Electronic Health Records: A Workshop, Institute of Medicine, Washington, D.C. (*invited lecture*)
- 10/2012 Strategies to Reduce Perioperative Blood Transfusion, American Association of Blood Banks, Boston, MA (*invited lecture*)
- 10/2012 How to Predict Adverse Outcome in Ambulatory Anesthesia, American Society of Anesthesiologists Annual Meeting, Washington, DC (*invited lecture*)
- 10/2012 AIMS and Perioperative Drug Studies: Past, Present, and Future. International Society for Anaesthetic Pharmacology, Washington, DC (*invited lecture*)
- 11/2012 An Institution-Wide Approach to Improving LGBTI Health, Association of American Medical Colleges Annual Meeting, San Francisco, CA (*invited lecture*)
- 1/2013 Perioperative Information Management Systems to Support Quality Initiatives, Society for Technology in Anesthesia, Scottsdale, AZ (*invited lecture*)
- 1/2013 Electronic Reporting Needs of Anesthesiologists, Society for Technology in Anesthesia, Scottsdale, AZ (*panel presentation*)
- 3/2013 Implementing a Perioperative Data Warehouse. Healthcare Information and Management Systems Society (HIMSS) Annual Meeting, New Orleans, LA (*invited lecture*)
- 5/2013 Using Decision Support and Informatics to Drive Quality and Reliability in the Operating Room, Weill Cornell Medical College, Department of Anesthesiology Grand Rounds (*invited lecture*)
- 5/2013 Informatics and Communication in the Perioperative Environment, Weill Cornell Medical College, Department of Anesthesiology (*invited lecture*)
- 9/2013 An Institution-Wide approach to improving LGBTI Health, GLMA Annual Meeting, Denver, CO (*invited keynote address*)
- 9/2013 Documentation and Identification of LGBTI Patients in Electronic Health Records, GLMA Annual Meeting, Denver, CO (*invited lecture*)
- 9/2013 Student-Faculty Synergy: Working for Improvement in LGBT Curriculum and Climate in Health Professions Schools, GLMA Annual Meeting, Denver, CO (*invited lecture*)
- 10/2013 Real-Time Electronic Data for Feedback and Learning, American Medical Association Accelerating Change in Medical Education Consortium Meeting, Chicago, IL (*invited lecture*)
- 10/2013 Advanced Approaches to Using Informatics Tools in the Perioperative Environment, University of Florida College of Medicine, Department of Anesthesiology Grand Rounds, Gainesville, FL (*invited lecture*)
- 10/2013 Using Databases to Guide Your Ambulatory Practice, American Society of Anesthesiologists Annual Meeting, San Francisco, CA (*panel presentation*)
- 11/2013 Diversity and Academic Medical Centers: Development of a Program for LGBTI Health, University of Pennsylvania School of Medicine, Philadelphia, PA (*invited lecture*)
- 11/2013 Perioperative Care in an Era of Quality Assessment, American Medical Association Interim Meeting, Washington, DC (*invited lecture*)
- 11/2013 Advocacy and Leadership: Shaping Your Medical Career, American Medical Association Interim Meeting, Washington, DC (*panel presentation*)

- 1/2014 Minimizing Unwarranted Blood Transfusions, Patient Safety Movement 2014 Summit, Laguna Nigel, CA (*panel presentation*)
- 1/2014 Practical Approaches to Perioperative Genomics, Society for Technology in Anesthesia Annual Meeting, Orlando, FL (*invited lecture*)
- 1/2014 Using Change Management to Improve LGBTI Health in Academic Medicine, Creating Change, Houston, TX (*invited lecture*)
- 3/2014 Automated Near Real-Time Clinical Performance Feedback for Residents: One Piece of the Milestones Puzzle, ACGME Annual Meeting, Washington, DC (*invited lecture*)
- 4/2014 Leveraging Informatics Tools to Improve Reliability & Outcomes in the Operating Room, University of Florida College of Medicine, Department of Anesthesiology Grand Rounds, Jacksonville, FL (*invited lecture*)
- 6/2014 Improving Care through Training in Quality and Safety, Care Management. 2014 AAMC Integrating Quality Meeting, Rosemont, IL (*panel presentation*)
- 8/2015 Anesthesiology in Combat: Perspectives from the Frontlines, Tufts University Department of Anesthesiology Grand Rounds
- 9/2015 Health Information Technology Safety. Partnership for Health IT Safety, ECRI Institute, Plymouth Meeting, PA. (*panel presentation*)
- 10/2015 Utilizing Anesthesia Information Management Systems to Improve Outcomes: How Can Anesthesiologists Minimize Mortality and Adverse Outcomes. 2015 American Society of Anesthesiologists Annual Meeting, San Diego, CA (*panel presentation*)
- 11/2015 User Centered Design for Electronic Health Records, American Medical Association Interim Meeting, Atlanta, GA (*invited lecture*)
- 11/2015 Love Wins: Advocacy and LGBT Health, American Medical Association Interim Meeting, Atlanta, GA (*invited lecture*)
- 12/2015 Creating an Informatics Group in a Anesthesiology Department or Practice Group: Rationale and Strategies. 69th PostGraduate Assembly in Anesthesiology, New York, NY (*panel presentation*)
- 12/2015 Technology Applications to Enhance Anesthesia Practice. 69th PostGraduate Assembly in Anesthesiology, New York, NY (*panel presentation*)
- 1/2016 Challenges and Opportunities in Anesthesia Technology Development, Society for Technology in Anesthesia, West Palm Beach, FL (*workshop*)
- 2/2016 Decision Support & Informatics: Current Approaches for Quality, Henry Ford Hospital, Detroit, Michigan (*invited lecture*)
- 2/2016 Decision Analysis & Slow Thinking: A Structured Approach to Complex Decision Making, Henry Ford Hospital, Detroit, Michigan (*invited lecture*)
- 2/2016 Career Planning & Decision Making: How to Structured Complex Decisions, University of Massachusetts Combined Surgery and Anesthesia Journal Club, Worcester, Massachusetts (*invited lecture*)
- 2/2016 Physician Payment Reform: What You Need to Know to Survive, University of Massachusetts Combined Surgery and Anesthesia Grand Rounds, Worcester, Massachusetts (*invited lecture*)
- 2/2016 Approaches to Supporting LGBTI Patients and Families, University of Massachusetts, Worcester, Massachusetts (*invited lecture*)
- 3/2016 Health Care and the Transgender Community, American Health Lawyers Association, Washington, DC
- 3/2016 Physician Advocacy, American Society of Anesthesiologists Board of Directors Meeting, Chicago, IL
- 3/2016 Integrating Quality: Aligning Medical Student QI Efforts with Health System Needs,

- 4/2016 AMA Accelerating Change in Medical Education Consortium Meeting, Hershey, PA
Creating the Medical School of the Future, Association of Health Care Journalists Annual Meeting, Cleveland, OH
- 4/2016 Strategies to Integrate LGBT Health Into Medical Education, Building the Next Generation of Academic Physicians Annual Meeting, New York, NY
- 5/2016 Clinical Data Validation & Analysis: Challenges in Measuring Provider Performance, Qualified Clinical Data Registries Conference, Chicago, IL
- 5/2016 Big Data Defined & The Impact on Quality Management, Society of Critical Care Anesthesiologists Annual Meeting, San Francisco, CA
- 6/2016 Improving Electronic Health Records Usability, American Medical Association Annual Meeting, Chicago, IL
- 6/2016 Using Natural Language Processing to Advance Our Understanding of LGBT Health Disparities, Harvard Medical School –Health Disparities Program, Boston, MA (*Keynote Speaker*)
- 8/2016 Teaching LGBT Health in Health Professions Education, Texas Tech University Health Sciences Center El Paso Paul L. Foster School of Medicine, Diversity and Global Health Perspectives Lecture, El Paso, TX
- 8/2016 Caring for LGBT Patients and Families, Texas Tech University Health Sciences Center El Paso Paul L. Foster School of Medicine, El Paso, TX
- 9/2016 Information Blocking, APIs & App Stores: The State of Play in Data Access, Health 2.0, Santa Clara, CA.
- 10/2016 Medical Student Coaching and The Use of E-portfolios. Accelerating Change in Medical Education National Meeting, Chicago, IL.
- 10/2016 MACRA: Where are we now, and where do we go from here. Physician Consortium for Performance Improvement Annual Meeting, Chicago, IL.
- 10/2016 Incorporating Transgender Care in the Facial Plastic Surgery Practice. American Academy of Facial Plastic and Reconstructive Surgery, Nashville, TN.
- 10/2016 Our Regulatory Environment: A Discussion With The Joint Commission and CMS, American Society of Anesthesiologists Annual Meeting, Chicago, IL.
- 10/2016 An Accidental Advocate: My Path to Leadership, Phillips Academy, Andover, MA.
- 11/2016 Partnering with Technology to Improve Surgical Safety. Baystate Medical Center Department of Surgery Grand Rounds, Springfield, MA.
- 11/2016 Payment Reform: An Overview of the Medicare Quality Payment Program, eHealth Initiative, Washington, D.C.
- 12/2016 Perspectives on an Electronic Health Record Safety Collaborative, Health IT Safety Day, Pew Charitable Trust & Office of the National Coordinator for Health IT, Washington, D.C.
- 1/2017 Engineering Challenges in Anesthesiology & Perioperative Medicine, Society for Technology in Anesthesia, San Diego, CA.
- 3/2017 Caring for LGBT Patients, University of Southern Alabama Medical School, Mobile, AL.
- 3/2017 Unique Aspects of LGBT Primary Care, University of Southern Alabama Medical School, Mobile, AL.
- 3/2017 Interprofessional Approaches to Teaching LGBT Health, University of Southern Alabama Medical School, Mobile, AL.
- 3/2017 The Business Case for LGBT Health Equity, The Economist Pride & Prejudice Symposium, New York, NY
- 3/2017 How Do I Get Paid? ACOs/MIPS/MACRA and the Changing Payment Landscape, Anesthesia Camp: Destination CME, Rancho Mirage, CA

- 3/2017 Quality Improvement in Your OR: Moving Beyond Metrics and Reporting Requirements, Anesthesia Camp: Destination CME, Rancho Mirage, CA
- 3/2017 Ongoing Professional Performance Evaluation (OPPE) & Focused Professional Practice Evaluations, Anesthesia Camp: Destination CME, Rancho Mirage, CA
- 4/2017 Digital Health, Innovation, and Security, Health Datapalooza, Washington, D.C.
- 5/2017 Elevating Perioperative Quality: Using Technology to Drive Reliability, Oregon Health Sciences University, Portland, OR.
- 5/2017 Anesthesia, Informatics, and Health Policy: My Unexpected Journey to Nashville. International Anesthesia Research Society Meeting, Washington, D.C.
- 5/2017 Cultural Competency for the Anesthesiologist: Strategies to Optimize The Care Delivery Process, International Anesthesia Research Society Meeting, Washington, D.C.
- 5/2017 How Are Physicians Adapting to New Technologies. eHealth Initiative, Washington, D.C.
- 6/2017 The Gender Revolution: Caring for LGBT Patients. American Medical Association, Chicago, IL.
- 8/2017 Caring for LGBTQ Patients. Touro College of Osteopathic Medicine, New York, NY.
- 9/2017 Advocating for Health Equality: Why It's Important and Why You Should Care. GLMA Annual Meeting, Philadelphia, PA.
- 10/2017 LGBTQ Advocacy and Eliminating Stigma. Midwest LGBTQ Health Symposium, Chicago, IL.
- 10/2017 Reimbursements Under MACRA: Retooling Your Informatics System for Quality, Advancing Care Information, and Outcomes. American Society of Anesthesiologists Annual Meeting, Boston, MA. Precision Medicine and Predictive Analytics: Using Data to Improve Patients Outcome in the Perioperative Period
- 10/2017 Precision Medicine and Predictive Analytics: Using Data to Improve Patients Outcome in the Perioperative Period. American Society of Anesthesiologists Annual Meeting, Boston, MA.
- 11/2017 Creating an Integrated Health Data Model. Harvard University Medical School, Boston, MA.
- 11/2017 Situational Leadership for Physicians. American Medical Association Interim Meeting, Honolulu, HI.
- 11/2017 Achieving Health Equity in As Physician Leaders. American Medical Association Interim Meeting, Honolulu, HI.
- 12/2017 Using Technology to Improve Perioperative Quality and Safety. University of California Los Angeles Medical Center, Los Angeles, CA.
- 1/2018 Engineering Challenges in Anesthesiology & Perioperative Medicine, Society for Technology in Anesthesia, Miami, FL.
- 3/2018 Systems Design for Improved Perioperative Glucose Control, Memorial Sloan Kettering / Cornell University Anesthesiology Grand Rounds, New York, NY.
- 3/2018 Operations Research & Improving Perioperative System Reliability, University of California San Francisco Department of Anesthesiology, Visiting Professor Seminar
- 5/2018 Transforming Patient Care through Technology, Workgroup for Electronic Data Interchange (WEDI) National Conference, Scottsdale, AZ.
- 5/2018 Challenges and Opportunities for Semantic Interoperability, New Jersey State Medical Association Annual Meeting, Long Branch, NJ.
- 5/2018 Caring for Transgender Patients: The Role of the Gynecologist. Rutgers Robert Wood Johnson Medical School, OB/GYN Grand Rounds. New Brunswick, NJ

International

- 6/2009 Innovative Process Control in the Perioperative Environment / Invited Lecture
Department of Anesthesia, British Columbia Children's Hospital; Vancouver, Canada
- 6/2009 The Impact of Information Technology on Patient Safety / Panel Presentation
Canadian Society of Anesthesiologists; 2009 Annual Meeting, Vancouver, Canada
- 5/2010 Real-Time Intraoperative Decision Support: Challenges and Opportunities / Invited
Lecture
South East Dublin Department of Anaesthesia; Dublin, Ireland
- 5/2010 Better Healthcare for Diverse Communities
GDI Annual Meeting; Dublin, Ireland
- 6/2010 Managerial & Clinical Decision Support in the Digital Operating Room
CARS 2010 Computer Assisted Radiology and Surgery, Geneva, Switzerland (*invited
lecture*)
- 9/2010 Operating Room Logistics and Real-Time Decision Support
Society for Medical Innovation and Technology, Trondheim, Norway (*invited lecture*)
- 9/2010 Medical Informatics, Patient Safety and Clinical Decision Support: What's the Evidence
Norwegian University of Science and Technology, Trondheim, Norway (*invited lecture*)
- 2/2011 Impact of Noninvasive Blood Monitoring & Implications for Critical Care Patients
Canadian Critical Care Conference, Whistler, British Columbia, Canada (*invited lecture*)
- 8/2011 Opportunities for Real Time Clinical Decision Support in Acute Care Environments
Norwegian University of Science and Technology, Trondheim, Norway (*invited lecture*)
- 9/2011 Utilizing Anesthesia Information Management Systems To Improve Perioperative
Outcomes, International Congress of the Israeli Society of Anesthesiologists, Tel Aviv,
Israel (*invited lecture*)
- 9/2011 Simulation is Worthless: A Pro-Con Debate, International Congress of the Israeli Society
of Anesthesiologists, Tel Aviv, Israel
- 3/2012 Patient Centered Electronic Data Gathering Tools for Preoperative Evaluations, WFA
World Congress of Anaesthesiologists, Buenos Aires, Argentina (*invited lecture*)
- 1/2013 Perioperative Clinical Decision Support: What Works and What Doesn't, 31st Annual
Symposium: Clinical Update in Anesthesiology, Surgery and Perioperative Medicine
Curacao, The Netherlands Antilles (*invited lecture*)
- 3/2013 Using Perioperative Information Management Systems to Support Clinical Research &
Quality Improvement In The Operating Room, University Medical Center, Utrecht,
Netherlands (*invited lecture*)
- 3/2013 Improving Patient Care and Patient Safety in the Operating Room, University Medical
Center, Utrecht, Netherlands (*invited lecture*)
- 7/2013 Effective Health Communication, U.S. Naval Hospital, Rota, Spain (*invited lecture*)
- 1/2014 Using Real-Time Clinical Staff Performance Metrics to Improve Quality & Safety in the OR,
32nd Annual Symposium: Clinical Update in Anesthesiology, Surgery and Perioperative
Medicine, Paradise Island, Bahamas, (*invited lecture*)
- 12/2014 Principles of Effective Teamwork and Communication with Patients, NATO Role III
Multinational Medical Unit, Kandahar, Afghanistan (*invited lecture*)
- 1/2015 Field Airway Management, RMSI, Kandahar Airfield, Afghanistan (*invited lecture*)
- 3/2015 Caring for LGBT Patients, NATO Role III Multinational Medical Unit, Kandahar,
Afghanistan (*invited lecture*)
- 4/2015 Data Visualization to Support Quality Initiatives, NATO Role III Multinational Medical
Unit, Kandahar, Afghanistan (*invited lecture*)
- 1/2016 Advances in Perioperative Information Systems, 34th Annual Symposium: Clinical Update
in Anesthesiology, Surgery, and Perioperative Medicine, San Juan, Puerto Rico (*invited*

lecture)

1/2017 Using Informatics to Improve Safety, 35th Annual Symposium: Clinical Update in Anesthesiology, Surgery, and Perioperative Medicine, Cancun, Mexico (*invited lecture*)

Report of Clinical Activities and Innovations

Practice Activities

2008-2010	Hospital Practice	Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital	One clinical day / week
2008-2011	Outpatient Adult Medicine Practice	United States Navy Health Clinic New England, Newport, Rhode Island	Two clinical days / month
2010-present	Hospital Practice	Department of Anesthesiology, Vanderbilt University Medical Center	Two clinical days / week
2011-present	Outpatient Adult and Adolescent Medicine Practice	United States Navy Health Clinic, Smyrna, Tennessee	Two clinical days / month
2014-2015	Combat Trauma Hospital Practice	NATO Role III Multinational Medical Unit, Kandahar, Afghanistan	7 days / week

Report of Education of Patients and Service to the Community

Educational Material for Patients and Lay Community:

12/2008	“Medical Devices Lag in iPod Age”	Interviewee	Boston Globe
12/2008	“Connections and Misconnections”	Interviewee	DeviceTalk
12/2008	“Medical Devices Aren’t Making the Grade”	Interviewee	WellSphere
11/2009	“AIMS Assist Clinical Competency Efforts”	Interviewee	Anesthesiology News
11/2009	“AIMS Data A Gold Mine – With Some Tarnish”	Interviewee	Anesthesiology News
4/2010	“CMS Nixes EHR Funding Incentives for Anesthesiologists”	Interviewee	Anesthesiology News
5/2010	“Political Intelligence”	Interviewee	Boston Globe
10/2010	“Real-Time Hemoglobin Monitoring During Surgery Cuts Blood Transfusions”	Interviewee	Medscape
10/2010	“Masimo's Continuous Hemoglobin Monitor Helps Reduce Blood Transfusions”	Interviewee	Medgadget
10/2010	“Study: Masimo’s hemoglobin monitor is highly effective”	Interviewee	Medical Device Daily
10/2010	“RealTime NonInvasive Blood Monitor Could Cut Transfusions”	Interviewee	Medical News Today
10/2010	“Masimo touts blood-monitoring trial”	Interviewee	DOTmed Business News
10/2010	“New Real-Time Blood Monitoring May Lessen the Need for Transfusions During Surgery”	Interviewee	Scientific American
11/2010	“At a Glance: Transfusions”	Interviewee	Anesthesiology News

12/2011	“Excessive Lab Testing in Renal Failure Patients”	Interviewee	Anesthesiology News
3/2012	“Towers of Babel in Hospitals as Record Systems Struggle to Communicate”	Interviewee	Anesthesiology News
4/2012	“Potassium Check Before Surgery May Be ‘Low-Yield’ Diversion”	Interviewee	Anesthesiology News
10/2012	“Diabetes Notification System to Improve Perioperative Outcomes”	Interviewee	Outcome Magazine
10/2012	“Adding Increased Glucose Monitoring Can Optimize Perioperative Care of Diabetic Patients”	Interviewee	News-Medical.net
11/2012	“New doctors trained to overcome LGBT health care gap”	Interviewee	American Medical News
12/2012	“Delegates adopt physician employment principles”	Interviewee	American Medical News
2/2013	“Firing hinges on employed doctor’s medical judgment”	Interviewee	American Medical News
2/2014	“Penn launching LGBT health initiative”	Interviewee	Philadelphia Inquirer
8/2014	“Deadly drug mix: Fentanyl makes a comeback”	Interviewee	Philadelphia Inquirer
6/2017	“Pride: A Conversation With Dr. Jesse Ehrenfeld”	Interviewee	Nashville Scene
4/2018	“Prepping for PrEP”	Interviewee	Out and About

PodCasts:

6/2014	“Informatics, Perioperative information systems”	OpenAnesthesia.org
6/2014	“Vanderbilt Cares: What Do I Need to Know As An LGBTI Patient or As Their Provider?”	Vanderbilt Health Plus
4/2015	“Airway Management”	Audio Digest
5/2015	“Post-operative Care and Management of Complications”	Audio Digest
5/2016	“LGBTI Focus on Mental Health”	Vanderbilt Health Plus
10/2016	“Neuromuscular Blockade and Pneumonia Moderator”	Anesthesiology
3/2017	“Perioperative Systems Design and Glucose Control During Surgery”	Anesthesiology

Narrative Report:

I am a clinical anesthesiologist with strong interests in health care systems design, education, research, technology, and health policy. My time is split among teaching, clinical research in bioinformatics, education research and clinical practice. My clinical interests are anesthesia for neurosurgery. My research interests focus in two areas: (1) how we can leverage technology to improve learning and practice across the entire health professions education continuum, and (2) how information technology can more effectively protect patients from harm and impact processes of care within the perioperative environment. For the past decade, I have advocated on behalf of LGBTI patients, physicians, and trainees.

Since I entered residency, I have conducted health services research focusing on education and biomedical informatics leading to the presentation of over 220 abstracts at national/international meetings and the publication of over 175 manuscripts in high impact peer-reviewed journals. Additionally, I have co-authored seventeen clinical texts and over 50 book chapters. My interests within bioinformatics include: learning and perioperative systems design, real-time decision support via pragmatic applications of process monitoring & control, and the development/application of perioperative risk models and outcomes measures. I have received funding from the National Institutes of Health, the Robert Wood Johnson Foundation, the Foundation for Anesthesia Education and Research, the Anesthesia Patient Safety Foundation Grant, and the Department of Defense. I also received two additional separate \$100,000 grants to design and implement programs focused on education innovation. My recent work has focused on the development of new care delivery models, including a successful and sustained implementation of a Perioperative Surgical Home at Vanderbilt that led to marked reductions in hospital length of stay and improved patient outcomes. The unifying theme of my work has been to comprehend the science behind how information technology can change educate trainees and providers reduce variability, and facilitate improved overall system reliability and performance. I have developed a reputation as a successful innovator, with surgeons, anesthesiologists, and educators inviting me to speak at national and international meetings.

Since 2016, I have served as Director of Education Research for the Office of Health Sciences Education in the Vanderbilt University School of Medicine. In this role, I work across the entire continuum of training in the health sciences (UME, GME & CME) to facilitate education research and scholarship initiatives by providing mentorship and oversight to junior faculty. I participate in didactic and clinical teaching across the entire educational continuum, from premedical students to advanced clinicians. I coordinate the monthly VUMC Education Works in Progress Seminar Series, LGBTI Health Grand Rounds, Anesthesia Informatics Journal Club, mentor Vanderbilt undergraduate students in a structured summer clinical research program, precept medical students in the operating room, and lecture in several graduate and undergraduate courses across Vanderbilt University. I was selected to develop and serve as a course director for the Vanderbilt Foundations of Health Care Delivery Course – a comprehensive 4-year required medical school course, which is designed to provide sustained experiential learning for students by integrating them into a clinic throughout their entire undergraduate medical training. I am a co-investigator on a \$1,000,000 Accelerate Change in Medical Education Grant from the American Medical Association. I was named course director for a month-long 4th year medical student immersion course entitled “Sex, Sexuality, and Sexual Health.” I also created and now serve as rotation director for a required 2 week professional development rotation that is required of all of our trainees during their intern year. This rotation is now the highest rated rotation across the four year program. I have received several teaching awards, including the prestigious Excellence in Teaching Award from Harvard Medical School. My evaluations include comments such as “Dr. Ehrenfeld seemed genuinely concerned with making sure that we learned the material and that we enjoyed tutorial” and “Dr. Ehrenfeld was a great tutorial leader and he went out of his way to make the sessions enjoyable for us. I learned a lot from him and truly enjoyed being in the group with him.” Within my department, I am consistently rated a top educator, and lecture in the core resident curriculum where my lectures routinely received some of the highest lecture ratings of the year (9.5 out of 10) and I have been one of a small number of faculty to receive perfect clinical teaching evaluations (5 out of 5 in all categories).

My significant supporting activities are administration and institutional service. I have contributed a significant body of work through service on several distinguished national committees (ASA Standards & Practice Parameters Committee, New England Journal of Medicine Publications Committee). I was

elected to the Board of Trustees of the American Medical Association in 2014, where I currently serve as Board Secretary and have focused on policy issues related to education and health information technology. In this role I have represented physicians in high-level policy discussions across multiple federal agencies, on Capitol Hill, and at the White House. These activities permit me to shape national healthcare policy through my advocacy for physicians and patients. I founded and serve as Director of the Office of LGBTI Health at Vanderbilt University, currently serve on the Association of American Medical College's LGBTI Liaison Group, as an advisor to the VUMC LGBTI student group, served as Chair of the Massachusetts General Hospital LGBTI employee resource group, Chair of the Massachusetts Committee on LGBTI health, and was previously active as a member of the Board Committee on Quality and Compliance for Fenway Community Health. Additionally, I serve as a consultant to the Chancellor on LGBTI issues. These activities have permitted me to improve tolerance and care access for LGBTI patients and physicians, through sponsorship of programs and CME lectures to support diverse patients, providers, and trainees. In recognition for my work in supporting equity and inclusion, in 2018 I was named the Joseph A. Johnson, Jr. Distinguished Leadership Professor.