# James J. Lamberg, DO, FASA, CPPS

## james.lamberg@gmail.com

#### **EDUCATION**

DO	2007 – 2011	Doctor of Osteopathic Medicine Lake Erie College of Osteopathic Medicine, Erie, PA
BEng	2002 – 2006	Bachelor of Computer Engineering with Biomedical Option University of Minnesota – Twin Cities, Institute of Technology, Minneapolis, MN
BEng	2001 – 2005	Bachelor of Electrical Engineering with Biomedical Option University of Minnesota – Twin Cities, Institute of Technology, Minneapolis, MN

#### **POSTGRADUATE TRAINING**

Fellowship	2015 – 2016	Critical Care Medicine Pennsylvania State University Milton S. Hershey Medical Center, Hershey, PA
Residency	2011 – 2015	Anesthesiology, Integrated Four-Year Program Pennsylvania State University Milton S. Hershey Medical Center, Hershey, PA
Internship	2011 – 2012	Recognition of PGY-1 (OGME1) Year by American Osteopathic Association American Osteopathic Association Program and Training Review Council

#### **MEDICAL LICENSURE**

2014 – Present	Pennsylvania, State Board of Osteopathic Medicine (Unrestricted), #OS016972
2011 – Present	National Provider Identifier (NPI), Anesthesiology, NPI Registry #1629362827
2011 - 2016	Pennsylvania, State Board of Osteopathic Medicine (Training), #OT014138

#### **BOARD CERTIFICATIONS**

2019 – Present	Certified Professional in Patient Safety, Certification Board for Professionals in Patient Safety CPPS Certification in 2019, Certificate #PS0272422
2017 – Present	Perioperative Transesophageal Echocardiography (PTE-B), National Board of Echocardiography Basic Level Certification in 2017, Certificate #2016-00031201
2016 – Present	Critical Care Medicine (D.ABA), American Board of Anesthesiology Primary Certification in 2016, Certificate #54753
2016 – Present	Anesthesiology (D.ABA), American Board of Anesthesiology Primary Certification in 2016, Certificate #54753

#### **SOCIETY FELLOWSHIPS**

Fellow of the American Society of Anesthesiologists (FASA)

## **ADDITIONAL CERTIFICATIONS**

2022 – Present 2020 – Present 2011 – Present 2007 – Present 2005 – Present 2005 – Present	Master Certification: Just Culture Champion/Certification Course Instructor: Advanced Trauma Life Support (ATLS) For Doctors, American College of Surgeons Advanced Trauma Life Support (ATLS) For Doctors, American College of Surgeons Pediatric Advanced Life Support Provider (PALS), American Academy of Pediatrics Advanced Cardiac Life Support Provider (ACLS), American Heart Association Basic Life Support Provider (BLS), American Heart Association
2013 - 2019 2007 - 2018 2007 - 2017 2005 - 2019 2005 - 2015 2004 - Present	National Faculty: ACLS Experienced Provider (ACLS-EP), American Heart Association Instructor: Pediatric Advanced Life Support (PALS), American Academy of Pediatrics Cardiac Device Specialist (IBHRE), International Board of Heart Rhythm Examiners Instructor: Advanced Cardiac Life Support (ACLS), American Heart Association Instructor: Basic Life Support (BLS), American Heart Association Open Water SCUBA Diver, Scuba Schools International

## **WORK HISTORY**

Jan 2021 – Present	Physician Anesthesiologist and Chair of Multidisciplinary Peer Review Practice Areas: Cardiothoracic, Neurosurgery, Obstetrics, Orthopedics, Vascular, Pediatrics Lancaster General Health Physicians Anesthesiology, Lancaster, PA
Aug 2016 – Jan 2021	Physician Anesthesiologist Practice Areas: Cardiothoracic, Neurosurgery, Obstetrics, Orthopedics, Vascular, Pediatrics Anesthesia Associates of Lancaster, Lancaster, PA
Apr 2014 – Jul 2021	Physician Director: TrueLearn Anesthesiology Comprehensive Board Review TrueLearn, Mooresville, NC
Oct 2010 – Jul 2011	Director: Combank Osteopathic Medicine Comprehensive Board Review TrueLearn (Formerly Test Weapon), Pittsburgh, PA
Jan 2006 – Aug 2007	Software Engineer: Cardiac Medical Devices Medtronic Cardiac Rhythm Disease Management, Fridley, MN
Feb 2003 – Mar 2006	Communications Supervisor: Emergency Medical Services University of Minnesota Emergency Medical Service, Minneapolis, MN
Jun 2005 – Dec 2005	Quality Assurance Engineer Intern: Medical Devices Minnetronix, Saint Paul, MN
May 2002 – Jul 2005	Emergency Department Technician University of Minnesota Medical Center, Minneapolis, MN
Feb 2003 – Feb 2004	Phlebotomist: Plasma Donation Center ZLB Bioservices (Formerly Aventis), Minneapolis, MN
May 2002 – Sep 2002	Electrical Engineering Intern Alliant Techsystems, Plymouth, MN
Nov 2001 – May 2002	Electronics Technician: Medical Devices University of Minnesota Psychiatry Research, Minneapolis, MN

## **PUBLICATIONS (REFERRED)**

- 1. Answine JF, **Lamberg JJ**. In response: Interdisciplinary intraoperative communication and collaboration needed for optimal neuromuscular blockade management. *Journal of Anaesthesiology Clinical Pharmacology*. 2014 Jul;30(3):443-4. doi: 10.4103/0970-9185.137302. PMID 25190971.
- 2. **Lamberg JJ**, Adhikary SD, McFadden AT. Osteopathic Musculoskeletal Examination and Spinal Anesthesia In A Patient With Severe Scoliosis. *Journal of the American Osteopathic Association*. 2014 Jul;114(7):582-5. doi: 10.7556/jaoa.2014.112. PMID 25002451.
- 3. **Lamberg JJ**, Donahue KS. Near-Complete Upper Airway Obstruction From A Grape. *Anesthesiology*. 2015 Feb;122(2):435. doi: 10.1097/ALN.000000000000091. PMID 24304711.
- 4. **Lamberg JJ**, Answine JF. A Surgeon's Assessment of Inadequate Neuromuscular Antagonism In A Case of Prolonged Neuromuscular Blockade. *Journal of Anaesthesiology Clinical Pharmacology*. 2013;29(2):244-7. doi: 10.4103/0970-9185.111654. PMID 23878451.
- 5. **Lamberg JJ**, Cherian VT. Neuraxial Anesthesia In CADASIL Syndrome. *Journal of Neurosurgical Anesthesiology*. 2013 Apr;25(2):216. doi: 10.1097/ANA.0b013e3182836086. PMID 23461972.
- 6. **Lamberg JJ**, Farbaniec M, Kuperman EF. Massive Paraesophageal Hernia Mimicking Pulmonary Embolus. *Journal of General Internal Medicine*. 2013;28(9):1241. Epub 2013 Feb 13. doi: 10.1007/s11606-013-2353-0. PMID 23404200.
- 7. **Lamberg JJ**, Gordin VN. Serotonin Syndrome in a Patient with Chronic Pain Polypharmacy. *Pain Medicine*. Pain Med. 2014 Aug;15(8):1429-31. Epub 2012 Aug 23. doi: 10.1111/j.1526-4637.2012.01468.x. PMID 22925399.

#### PUBLICATIONS (BOOK CHAPTERS)

- 1. Ito K, **Lamberg JJ**, O'Connell FM. Airway Management, Chapter 2. 2021. Fundamental Critical Care Support (FCCS), 7th Ed. Society of Critical Care Medicine.
- 2. Ito K, **Lamberg JJ**, O'Connell FM. Airway Devices, Appendix 2. 2021. Fundamental Critical Care Support (FCCS), 7th Ed. Society of Critical Care Medicine.
- 3. **Lamberg JJ**. Emergency Medications (Textbook Chapter Online). Open Anesthesia. 2020. Previously intended for: Principles of Paramedic Care, 1st Ed. Navarro, K. Philadelphia: F. A. Davis. Available at: http://www.openanesthesia.org/emergency-medications/

#### **PUBLICATIONS (NON-REFERRED)**

- 1. **Lamberg JJ**. Propofol for Trauma Patients: Whose Sandbox? *PSA Sentinel Newsletter*. Pennsylvania Society of Anesthesiologists. Spring 2023.
- 2. **Lamberg JJ**. Clinical Peer Review and Just Culture. *ASA Monitor*. American Society of Anesthesiologists. September 2022.
- 3. **Lamberg JJ**. Axillary Central Venous Cannulation For Cardiac Surgery (Article and Procedural Video). *Journal of Lancaster General Hospital*. Summer 2017.
- 4. **Lamberg JJ**, Verbeek TA. Practice Advisory: Difficult Airway Communication. Penn State Milton S. Hershey Medical Center 2016.
- 5. Bilko AF, **Lamberg JJ**, CME: Management of the Patient with Amniotic Fluid Embolism. *Anesthesiology News*. 2015; June: 16.
- 6. **Lamberg JJ**, Malhotra AK, McAlevy ME. Intracardiac Epinephrine Injection During Open Thoracotomy and Circulatory Arrest. *Journal of Anesthesia & Clinical Research*. 2013;4(7):341. doi: 10.4172/2155-6148.1000341.

- 7. **Lamberg JJ**, Sathishkumar S. Practice Advisory: Cephalosporin Antibiotic Use In Patients With Reported Penicillin Allergy. Penn State Milton S. Hershey Medical Center 2013.
- 8. **Lamberg JJ**, Yoo LJ. Letter To The Editor: Swab All Vials With Alcohol. *Anesthesia Patient Safety Foundation Newsletter*. 2012;Fall:33.

#### **CLINICAL REFERENCE ARTICLES**

- 1. **Lamberg JJ**. Advanced Cardiac Life Support (ACLS): Asystole/PEA. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172100-overview
- 2. **Lamberg JJ**. Advanced Cardiac Life Support (ACLS): Bradycardia. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172085-overview
- 3. **Lamberg JJ**. Advanced Cardiac Life Support (ACLS): Tachycardia. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172112-overview
- 4. Lamberg JJ. Advanced Cardiac Life Support (ACLS): VF/VT Arrest. Medscape Reference. Published March 21, 2014.
- 5. **Lamberg JJ**. Pediatric Advanced Life Support (PALS): Asystole/PEA. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2066758-overview
- 6. **Lamberg JJ**. Pediatric Advanced Life Support (PALS): Bradycardia. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2066778-overview
- 7. **Lamberg JJ**. Pediatric Advanced Life Support (PALS): Tachycardia. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2066794-overview
- 8. Lamberg JJ. Pediatric Advanced Life Support (PALS): VF/VT Arrest. Medscape Reference. Published March 21, 2014.
- 9. **Lamberg JJ**. Neonatal Advanced Life Support (NALS). *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172079-overview
- 10. **Lamberg JJ**. Basic Life Support (BLS): Adult. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172066-overview
- 11. **Lamberg JJ**. Basic Life Support (BLS): Pediatric. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2058889-overview
- 12. **Lamberg JJ**. Rapid Sequence Induction and Intubation. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172130-overview
- 13. **Lamberg JJ**. Mallampati Classification. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172419-overview
- 14. **Lamberg JJ**. Local and Topical Anesthetics. *Medscape Reference*. Published March 21, 2014. Revision March 2018. Available at: http://emedicine.medscape.com/article/2172060-overview
- 15. **Lamberg JJ**. Light's Criteria. *Medscape Reference*. Published March 21, 2014. Updated August 2018. Revision June 2019. Available at: http://emedicine.medscape.com/article/2172232-overview

#### INVITED LECTURES

2022 **Lamberg JJ.** Oral Presentation.

"How to Perform a Quality Review: Medical Peer Review and Just Culture" AOCA Annual Convention and Conclave (VAPOR), September 19, Phoenix, AZ, USA

2019 Lamberg JJ. Oral Presentation.

"Dexmedetomidine In The Perioperative Setting"

South Central PA Association of PeriAnesthesia Nurses, October 26, Lancaster, PA, USA

2014 Lamberg JJ, Budde AO. Oral Presentation and Simulation Session.

"Airway Management and Airway Exchange Techniques"

ASA Technologists and Technicians Regional Conference, August 24, Hershey, PA, USA

#### **EDITORIAL ASSISTANCE**

2022 Invited Reviewer. ECRI Patient-Centered Outcomes Research Institute (PCORI).

"Ketamine Prescribed for In-Home Use to Treat Mental Health Conditions"

2021 Invited Reviewer, ECRI Institute Guidance, Health System Risk Management.

"Unintentionally Retained Surgical Items"

2021 Invited Reviewer, ECRI Patient-Centered Outcomes Research Institute (PCORI).

"MDMA-Assisted Psychotherapy to Treat Severe Posttraumatic Stress Disorder"

2016 Invited Reviewer. Journal of Multidisciplinary Healthcare.

"Clinical Osteopathic Observation of Patients with Left-Ventricular Assistance Devices"

2014 Invited Reviewer. Aperito Journal of Surgery and Anaesthesia.

"Anesthetic Considerations for a Patient with Intralobar Pulmonary Sequestration"

#### **CONFERENCES AND WORKSHOPS**

Young A, Shin H, Morgan M, Kim H, Brown T, **Lamberg**, **JJ**, Perea, LL. Quickshot Presentation.

"Bundling Procedures In Critically-Ill Trauma Patients: Should It Be Done?" 17th Annual Academic Surgical Congress, February 2, Orlando, FL, USA.

Young A, Shin H, Morgan M, Kim H, Brown T, **Lamberg**, **JJ**, Perea, LL. Quickshot Presentation.

"Bundling Procedures In Critically-Ill Trauma Patients: Should It Be Done?" Pennsylvania Trauma Systems Foundation Fall Conference, October 14, Virtual.

2016 Horst M, **Lamberg JJ**. Poster Presentation. ASA.

"Colovesical Fistula Leading to Hyperchloremic Metabolic Acidosis and Acute Kidney Injury"

American Society of Anesthesiologist Conference, October 22, Chicago, IL, USA

2015 Lamberg JJ, Anson JA. Poster Presentation. ASA.

"Emergency Airway Management of an Obtunded Patient With an In-Situ Tracheal T-Tube"

American Society of Anesthesiologist Conference, October 24, San Diego, CA, USA

2015 Lamberg JJ, Pilipovic M. Poster Presentation. PARRC.

"Arrhythmia During Transversus Abdominis Plane Block With EXPAREL"

Pennsylvania Anesthesiology Resident Research Conference, May 9, Philadelphia, PA, USA

2015 Lamberg JJ, Mooney JJ. Poster Presentation.

"Attempts At Breaching A Fingerprint-Secured Automated Medication Dispenser" Penn State Hershey Medical Center Resident Research Day, May 7, Hershey, PA, USA

Lamberg JJ, Caldwell JC, Gordin VN. Poster Presentation.

"Serotonin Syndrome and Chronic Pain Polypharmacy"

Penn State Hershey Medical Center Resident Research Day, May 23, Hershey, PA, USA

Lamberg JJ, Later SD, Satishkumar S, Kodavatiganti R. Poster Presentation. PARRC.

"Takotsubo Cardiomyopathy Prior To Induction of General Anesthesia"

Pennsylvania Anesthesiology Resident Research Conference, May 10, Pittsburgh, PA, USA

2013 Lamberg JJ, Malhotra AK, McAlevy ME. Poster Presentation.

"Beyond Pulp Fiction: Intracardiac Epinephrine Injection During Circulatory Arrest" Penn State Hershey Medical Center Resident Research Day, May 14, Hershey, PA, USA

2013 Lamberg JJ, Kodavatiganti R. Poster Presentation - First Place Award. PARRC.

"The Role of Intraoperative TEE in Trauma of Questionable Mechanism of Injury"

Pennsylvania Anesthesiology Resident Research Conference, May 11, Philadelphia, PA, USA

2012 Pott LM, **Lamberg JJ**. Oral Presentation. SAM.

"Difficult Airway Simulator"

Society for Airway Management Annual Scientific Meeting, September 22, Toronto, ON, Canada

2012 Lamberg JJ, Farbaniec M, Kuperman EF. Oral Presentation. SGIM.

"Bowel Beyond Borders: A Massive Paraesophageal Hernia Mimicking A Pulmonary Embolism"

Society for General Internal Medicine Annual Meeting, May 12, Orlando, FL, USA

2005 Lamberg JJ. Oral Presentation. IPC.

"Medical RFID, MRI, and EMC Testing"

International Printed Circuits Conference, June 23, Minneapolis, MN, USA

#### **CONSULTATION ASSISTANCE**

2020 Teleflex Central Line Interview, Lucchesi Business Consulting

Phone Consultation, Raleigh, NC, USA

2019 Vascular Access Device Interview, Hanover Research

Phone Consultation, Arlington, VA, USA

2019 Central Venous Catheter Advisory Board, MedSpace Exploration

Anesthesiology Annual Conference, Orlando, FL, USA

#### AWARDS AND HONORS

2023 Quality & Patient Safety Award: Difficult Airway Project

University of Pennsylvania, Penn Medicine Lancaster General Health, Lancaster, PA

2023 Award of Excellence, APEX 35th Annual Award for Publication Excellence, 2023

ASA Monitor, Series On Weaponized Reporting, Article: "Clinical Peer Review & Just Culture"

2022 Top Physician Under 40 Award

Pennsylvania Medical Society, Mechanicsburg, PA.

2022 Honorable Mention for 2022 CEO Award: Alpha Team Difficult Airway Project

Lancaster General Health, Lancaster, PA

2022 Most Enhancement to Safe Practices 2021: Alpha Team Difficult Airway Project

Lancaster General Health, Lancaster, PA

2015 Resident Case Conference Presentation Award, 1st Place

Department of Anesthesiology, Penn State Hershey Medical Center, Hershey, PA

2014 Resident Research Publication Award, 2nd Place

Department of Anesthesiology, Penn State Hershey Medical Center, Hershey, PA

2014 Resident Case Conference Presentation Award, 3rd Place

Department of Anesthesiology, Penn State Hershey Medical Center, Hershey, PA

Unsung Hero of Osteopathic Medicine 2014 American Osteopathic Association Resident Teaching Award 2013 Department of Anesthesiology, Penn State Hershey Medical Center, Hershey, PA Mentor Hall of Fame Inductee 2012 American Osteopathic Association and American Osteopathic Foundation **Professional Practice Award** 2012 Department of Anesthesiology, Penn State Hershey Medical Center, Hershey, PA Student Doctor of the Year 2011 Lake Erie College of Osteopathic Medicine, Erie PA T.O.U.C.H. Community Service Award 2011 Lake Erie College of Osteopathic Medicine, Erie PA LECOM Student Government Association Scholarship 2010 Lake Erie College of Osteopathic Medicine, Erie PA T.O.U.C.H. Community Service Award 2010 Lake Erie College of Osteopathic Medicine, Erie PA **LECOM Ambassador Scholarship** 2009 Lake Erie College of Osteopathic Medicine, Erie PA T.O.U.C.H. Community Service Award 2009 Lake Erie College of Osteopathic Medicine, Erie PA Student Doctor of the Month (August) 2008 Lake Erie College of Osteopathic Medicine, Erie PA Mortar Board Fellowship 2007 Mortar Board National Foundation Owen Schott Engineering Scholarship 2004 Institute of Technology, University of Minnesota, Minneapolis, MN Volunteer of the Year 2003 University of Minnesota Emergency Medical Services, Minneapolis, MN Roger Norby Engineering Scholarship 2002 Institute of Technology, University of Minnesota, Minneapolis, MN ATK Foundation Scholarship 2001 Alliant Techsystems, Minneapolis, MN

#### **TEACHING AND EDUCATION: PRESENTATIONS**

2022 Educational Lecture and Simulation Session

"ATLS: Airway Management"

Advanced Trauma Life Support, Lancaster General Health, June 2022

2022 Educational Lectures

"FCCS: Airway Management + Acute Respiratory Failure + Mechanical Ventilation"

Fundamental Critical Care Support, Lancaster General Health, May 2022

2021 **Educational Lecture** "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, December 2021 **Educational Lecture** 2021 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, August 2021 **Educational Lecture** 2021 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, May 2021 **Educational Lecture** 2020 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, January 2020 **Educational Lecture** 2019 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, April 2019 **Educational Lecture** 2018 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, October 2018 **Educational Lecture** 2018 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, June 2018 2017 **Educational Lecture** "Practical Thoracic Anesthesia" Department of Anesthesiology, Lancaster General Health, November 2017 **Educational Lecture** 2017 "Corneal Abrasions: MACRA, MIPS, AQI NACOR" Department of Anesthesiology, Lancaster General Health, September 2017 **Educational Lecture** 2017 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, September 2017 **Educational Lecture** 2017 "Anesthetic Pharmacology For Trauma" Department of Anesthesiology, Lancaster General Health, August 2017 Educational Lecture and Workshop 2017 "Ultrasound For Vascular Access" Department of Anesthesiology, Lancaster General Health, July 2017 **Educational Lecture** 2017 "Trauma Airway Guideline and Rapid Sequence Induction Review" Department of Anesthesiology, Lancaster General Health, June 2017 **Educational Lecture** 2017 "FCCS: Airway Management" Fundamental Critical Care Support, Lancaster General Health, February 2017 **Educational Lecture** 2017 "Review of Thoracic Anesthesia"

Department of Anesthesiology, Lancaster General Health, January 2017

2015 **Case Presentation** "Airway Emergency: Tracheal Stent" Department of Anesthesiology, Penn State Hershey Medical Center, May 2015 **Case Presentation** 2014 "Arrhythmia During Transversus Abdominis Plane Block Using Liposomal Bupivacaine" Department of Anesthesiology, Penn State Hershey Medical Center, August 2014 Journal Club Presentation 2014 "Perioperative Gabapentinoids" Department of Anesthesiology, Penn State Hershey Medical Center, January 2014 **Brief Oral Presentation** 2013 "Fact Or Fiction? Bag-Valve-Mask Devices: Spontaneous Breathing And Preoxygenation" Department of Anesthesiology, Penn State Hershey Medical Center, November 2013 **Case Presentation** 2013 "Emergency Appendectomy" Department of Anesthesiology, Penn State Hershey Medical Center, September 2013 **Brief Oral Presentation** 2013 "Cephalosporin Use In Patients With Reported Penicillin Allergy" Department of Anesthesiology, Penn State Hershey Medical Center, February 2013 **Case Presentation** 2013 "Pediatric Airway Emergency" Department of Anesthesiology, Penn State Hershey Medical Center, February 2013 **Brief Oral Presentation** 2013 "Fact Or Fiction? The Best Method For Preventing Propofol Burn Is..." Department of Anesthesiology, Penn State Hershey Medical Center, February 2013 Case Presentation 2012 "Transesophageal Echocardiography in Trauma" Department of Anesthesiology, Penn State Hershey Medical Center, December 2012 Case Presentation 2012 "Venous Air Embolism During Sitting Craniotomy" Department of Anesthesiology, Penn State Hershey Medical Center, November 2012 Journal Club Presentation 2012 "Managing Fresh Gas Flow To Reduce Environmental Contamination" Department of Anesthesiology, Penn State Hershey Medical Center, October 2012 **Case Presentation** 2012 "Post-Operative Corneal Abrasions"

#### TEACHING AND EDUCATION: AMERICAN HEART ASSOCIATION

2014	Medical Director, Advanced Cardiac Life Support Experienced Provider Course National Association of EMS Educators Annual Meeting, September 16-17, Reno, NV, USA
2013	Invited Instructor, Advanced Cardiac Life Support Experienced Provider Course American Heart Association Regional Meeting, June 17-18, Atlanta, GA, USA
2013	Invited Instructor, Advanced Cardiac Life Support Experienced Provider Course American Heart Association Regional Meeting, April 11-12, Saint Louis, MO, USA

Department of Anesthesiology, Penn State Hershey Medical Center, August 2012

#### TEACHING AND EDUCATION: RESIDENT PHYSICIANS

Sep 2015	Ultrasound Guided Vascular Assessment and Central Line Catheterization
Sep 2015	Anesthesia PGY-1/2 Residents: Trauma – Airway Management In Hypovolemia
Aug 2015	Anesthesia PGY-1 Residents: Objective Structured Clinical Examination
Jul 2014	Anesthesia PGY-1 Residents: Objective Structured Clinical Examination
Jun 2014	Anesthesia PGY-1 Residents: New Resident Orientation
May 2014	Anesthesia PGY-2 Residents: Objective Structured Clinical Examination
Jun 2013	Anesthesia PGY-1 Residents: New Resident Orientation
Sep 2012	Anesthesia PGY-1 Residents: Final Objective Structured Clinical Examination

#### TEACHING AND EDUCATION: MEDICAL STUDENTS

May 2016	PSUCOM Medical Student Workshop: Venipuncture and Intravenous Access
Oct 2015	PSUCOM Medical Student Workshop: Cardiopulmonary Resuscitation
May 2014	PSUCOM Surgery Clerkship Lecture: Anesthesia and Perioperative Complications
Apr 2014	PSUCOM Surgery Clerkship Workshop: Advanced Cardiac Life Support Simulation Session
Mar 2014	PSUCOM Anesthesia Clerkship Workshop: Introduction To Anesthesiology
Jul 2013	PSUCOM Anesthesia Clerkship Workshop: Advanced Cardiac Life Support Simulation Session
Jul 2013	PSUCOM Surgery Clerkship Lecture: Anesthesia and Perioperative Complications
Jun 2013	PSUCOM Medical Student Workshop: Venipuncture and Intravenous Access
Mar 2013	PSUCOM Anesthesia Clerkship Workshop: Airway Management Simulation Session
Feb 2013	PSUCOM Anesthesia Clerkship Workshop: Advanced Cardiac Life Support Simulation Session
Nov 2012	PSUCOM Anesthesia Clerkship Workshop: Advanced Cardiac Life Support Simulation Session
Sep 2012	PSUCOM Anesthesia Clerkship Workshop: Advanced Cardiac Life Support Simulation Session
Apr 2012	PSUCOM Anesthesia Clerkship Workshop: Airway Management Simulation Session

#### **QUALITY IMPROVEMENT PROJECTS**

2023	Cardiac Catheterization Sedation Improvement Project Department of Cardiology, Lancaster General Health
2022 – 2023	Central Venous Catheterization Improvement Project Multiple Departments, Lancaster General Health
2022	Capnography/ETCO2 Improvement Project Multiple Departments, Lancaster General Health
2022	Pediatric Frenotomy Improvement Project Department of Pediatrics, Lancaster General Health
2022	Perioperative Pacemaker/ICD Magnet Improvement Project Department of Anesthesiology, Lancaster General Health
2022	Post-Anesthesia Care Unit (PACU) Order Set, Antiemetics Update Department of Anesthesiology, Lancaster General Health
2021 - 2023	Difficulty Intravenous Access (DIVA) Project Women's and Babies Hospital, Lancaster General Health
2021 - 2022	Perioperative Management of Implanted Electronic Medical Devices (Policy Creation) Departments of Surgery and Anesthesiology, Lancaster General Health
2021 – 2022	Perioperative Use of Droperidol for Postoperative Nausea and Vomiting Department of Pharmacy, Lancaster General Health
2021	Development of Difficult Airway Team (Alpha Team) Response

Updates To Electronic Medical Record and Difficult Airway Notification Process Multiple Departments, Lancaster General Health Neonatal ICU Syphilis Screening and Testing Process 2021 Department of Pediatrics, Lancaster General Health Interventional Radiology Improvement Projects: Drug Dilution, Lab Result Review 2021 Department of Radiology, Lancaster General Health Cognitive Aid (Poster Update): Massive Transfusion Protocol 2021 Women's and Babies Hospital, Lancaster General Health Cognitive Aid (Poster Creation): Trauma Operating Room Checklist 2021 Departments of Anesthesiology and Trauma Surgery, Lancaster General Health Equipment Update, Front of Neck Access (FONA) Kits and Thoracostomy Kit 2021 Department of Anesthesiology, Lancaster General Health Epidural Blood Patch Project 2021 - 2022Departments of Anesthesiology and Pain Management, Lancaster General Health Review of Remimazolam as an Additional Short-Acting Procedural Sedative 2021 - 2022Department of Pharmacy, Lancaster General Health Perioperative Use of Aprepitant For Postoperative Nausea and Vomiting 2019 - 2022Department of Pharmacy, Lancaster General Health Perioperative Corneal Abrasions Protocol 2017 - 2019Department of Anesthesiology, Lancaster General Health 2017 - 2018Airway Management Trauma Guideline, Full Revision Trauma and Acute Care Surgery, Lancaster General Health Anesthesia Intensive Care Unit Progress Note Template 2014 - 2016Interdisciplinary Critical Care Committee, Penn State Hershey Medical Center Anesthesia Intensive Care Unit Admission Order Set 2015 - 2016Interdisciplinary Critical Care Committee, Penn State Hershey Medical Center Anesthesia Intraoperative Blood Management Order Set 2015 - 2016 Clinical Informatics and Analytics Committee, Penn State Hershey Medical Center Adult Endotracheal Intubation Order Set 2013 - 2014 Interdisciplinary Critical Care Committee, Penn State Hershey Medical Center Anesthesia Hospital Charges, Electronic Form Update 2013 - 2014Department of Anesthesiology, Penn State Hershey Medical Center Difficult Airway Letter, Form Update 2012 - 2012Department of Anesthesiology, Penn State Hershey Medical Center Perioperative Sharps Education, Flyer and Guidelines Update 2012 - 2013Department of Safety, Penn State Hershey Medical Center

Creation of Difficult Airway Carts, Educational Program, and Wristband System

#### **COVID-19 CRITICAL CARE TASK FORCE (2020)**

Critical Care Month-long involvement as a critical care intensivist overseeing multiple critical care units

Leadership role throughout crisis as anesthesiology liaison and with critical care surge team

Leadership Role

Developed multi-disciplinary surge plan for overflow into non-traditional critical care locations Focus in Society of Critical Care Medicine disaster principles including 4-S model for pandemics Review of hospital units for critical care capacity, isolation ability, and ability to use ventilators Collaboration with Pharmacy regarding drug shortages and alternative medications Tasked critical care providers with surge plan roles including oxygen surge plan Collaboration with Respiratory Therapy on ventilator inventory and alternative devices Assisted with curriculum development for cross-education of non-intensivist physicians Assisted with development of SCCM tiered pandemic staffing plan for critical care teams Created Anesthesia Machine Team who led a repurposing project to increase ventilators Created and assisted with protocols for use of anesthesia machines as critical care ventilators Assisted with creation of new Epic workflow for non-traditional critical care locations

**Guideline Creation** 

UPHS Novel Coronavirus Disease 2019 – i.e. "UPHS Critical Care Committee Guideline" LGH Patient Risk Stratification and Placement Guidelines For COVID19 Critical Care Surge

LGH Standard Extubation Procedure for COVID+/PUI Patients

LGH Airway Humidification Guideline to Reduce ETT Biofilm in COVID-19 Patients

LGH Guidelines for Bronchoscopy in COVID19 Positive Patients

LGH Neuromuscular Blocker Agent (NMBA) Protocol for Critically Ill Patients

LGH Sedation/Analgesia Protocol for Critically Ill Patients

LGH Guidelines for End of Life Cardiac Device Deactivation (Update)

LGH STAT Intubation COVID Order Set

Guideline Review

UPHS Multi-disciplinary Algorithm for Durable Enteral Access in Critically Ill COVID19 Patients

UPHS Ventilator Liberation and Extubation Procedure for COVID+/PUI Patients

UPHS Standard Extubation Procedure for COVID+/PUI Patients

UPHS COVID-19 Awake Proning Guideline for Patients in Critical Care Setting UPHS COVID-19 Awake Proning Protocol for Patients in Non-ICU Locations

UPHS Airway Humidification Guideline to Reduce ETT Biofilm in COVID-19 Patients UPHS Pain, Agitation, Delirium and Neuromuscular Blockade During COVID-19

UPHS Ventilator and ARDS Care During COVID-19
UPHS Tracheotomy in Ventilated Patients with COVID-19

UPHS Palliative Ventilator De-escalation Recommendations for COVID-19+ or PUI LGH Tracheostomy and Tracheostomy Tube Change During the COVID-19 Pandemic

LGH COVID Palliative Ventilator De-escalation/Withdrawal (ICU) Order Set

#### PROFESSIONAL AFFILIATIONS

2018 – Lifetime 2010 – Lifetime	American Society of Professionals in Patient Safety (ASPPS) Society for Technology in Anesthesia (STA)
2019 – Present 2012 – Present	Pennsylvania Medical Society (PAMED) Society of Critical Care Medicine (SCCM)
2010 – Present	Pennsylvania Society of Anesthesiologists (PSA)
2009 – Present	American Society of Anesthesiologists (ASA)
2010 - 2024	International Anesthesia Research Society (IARS)
2012 – 2021	Society of Critical Care Anesthesiologists (SOCCA)
2007 – 2021	American Osteopathic Association (AOA)
2007 – 2018	American Medical Association (AMA)
2009 – 2017	American Osteopathic College of Anesthesiologists (AOCA)
2009 – 2017	Pennsylvania Osteopathic Medical Association (POMA)
2008 – 2017	American Heart Association (AHA) Council on Cardiopulmonary, Preoperative, and Critical Care
2001 – 2017	IEEE Engineering in Medicine and Biology (EMB) Society
2011 - 2016	Society for Airway Management (SAM)
2010 – 2016	Society for Education in Anesthesia (SEA)

#### **ORGANIZATIONAL ACTIVITIES: HOSPITAL COMMITTEES**

2022 – Present	Chair, Patient and Co-worker Observation Committee Lancaster General Health, University of Pennsylvania Health System
2021 – Present	Critical Care Clinical Effectiveness Committee Lancaster General Health, University of Pennsylvania Health System
2021 – Present	Pharmacy and Therapeutics Committee Lancaster General Health, University of Pennsylvania Health System
2021 – Present	Pharmacy Formulary Committee Lancaster General Health, University of Pennsylvania Health System
2021 – Present	Chair, Multidisciplinary Peer Review Committee Lancaster General Health, University of Pennsylvania Health System
2021 – 2023	Hospital Mortality Committee Lancaster General Health, University of Pennsylvania Health System
2017 - 2022	Trauma Program Liaison (Department of Anesthesiology) Lancaster General Health and Pennsylvania Trauma Systems Foundation (PTSF)
2014 – 2016	Adult Code Blue Standardization Committee Penn State Hershey Medical Center
2014 – 2016	Adult Resuscitation Council Penn State Hershey Medical Center

### ORGANIZATIONAL ACTIVITIES: DEPARTMENTAL COMMITTEES

2020 – 2022	Morbidity and Mortality Conference Committee Department of Anesthesiology, Lancaster General Health
2012 – 2016	Medical Student Education Committee Department of Anesthesiology, Penn State Hershey Medical Center
2012 – 2016	Handoff Communications Committee Department of Anesthesiology, Penn State Hershey Medical Center
2011 – 2016	Clinical Informatics and Analytics Committee Department of Anesthesiology, Penn State Hershey Medical Center
2011 – 2016	Internet Solutions Committee Department of Anesthesiology, Penn State Hershey Medical Center

## **ACTIVITIES AND VOLUNTEERING**

2023 – Present	Diversity, Equity, and Inclusion (DEI) Ambassador Lancaster General Health, University of Pennsylvania Health System
2021	Volunteer COVID-19 Vaccinator, Vaccinate Lancaster Project Lancaster County Community Vaccination Center, Lancaster, PA
2013 - 2017	National Resource Volunteer Emergency Cardiovascular Care Science Committee, American Heart Association
2011 – 2016	Volunteer Instructor for ACLS, PALS, and BLS Courses Penn State Hershey Medical Center, Hershey, PA

2011 – 2016	Software Developer and Lead Editor Sepsis Guide Mobile Surviving Sepsis Application for Apple iOS
2010 – 2011	Volunteer Instructor for ACLS, PALS, and BLS Courses UPMC Hamot Medical Center, Erie, PA
2008 – 2011	Volunteer Instructor for Paramedic, EMT, ACLS, PALS, and CPR Courses EmergyCare Inc., Erie, PA
2011 – 2017	Software Developer and Lead Editor Pain Guide Mobile Pain Management Application for Apple iOS
2010	Volunteer Instructor for EMT, ACLS, and BLS Distance Education Allied Medical Training, Minneapolis, MN
2010 – 2021	Software Developer and Lead Editor Gas Guide Mobile Anesthesia Application for Apple iOS
2009 – 2021	Software Developer and Lead Editor OMM Guide Mobile Osteopathic Application for Apple iOS
2008 – 2009	Independent Study Pathway Representative Lake Erie College of Osteopathic Medicine, Erie, PA
2008 – 2009	Student Ambassador Lake Erie College of Osteopathic Medicine, Erie, PA
2006 – 2008	National Section Coordinator Mortar Board National Senior Honor Society
2006	Camp Counselor Camp Odayin for Children with Heart Disease
2006	National Conference Ambassador Mortar Board National Senior Honor Society
2005 – 2006	President University of Minnesota Chapter of Mortar Board National Senior Honor Society
2004 – 2007	Member National Associations of Emergency Medical Services Educators (NAEMSE)
2003 – 2006	Member Eta Kappa Nu (HKN) International Electrical Engineering Honor Society
2002 – 2013	Nationally Registered Emergency Medical Technician Advanced (EMT-I) National Registry of Emergency Medical Technicians
2001 – 2006	Volunteer Emergency Medical Technician University of Minnesota Emergency Medical Services, Minneapolis, MN
2001	National Competition Team Member FIRST Robotics, Orlando, FL

#### TRAINING CASE LOG

Perioperative Transesophageal Echocardiography 50: Performance and interpretation of basic intraoperative TEE examinations 2015 - 2016

100: Review and interpretation of basic TEE examinations Completion of ASA/SCA Basic Perioperative TEE Education Program

2011 - 2015

Anesthesiology Residency: Procedural Involvement 320: Life threatening pathology, patient unlikely to survive > 24 hours without procedure

57: Intrathoracic, non-cardiac

34: Cardiac with cardiopulmonary bypass, primary provider

14: Cardiac without cardiopulmonary bypass, primary provider

64: Cesarean section, primary provider

103: Vaginal delivery, anesthesia involvement (labor epidural)

25: Cesarean section, high-risk, primary provider

7: Vaginal delivery, high risk, primary provider

164: Epidural anesthesia (epidural catheter technique)

84: Spinal anesthesia (subarachnoid blockade)

3: Combined spinal epidural (CSE)

107: Peripheral nerve block, single shot

18: Peripheral nerve block, continuous catheter technique

226: Pediatric patient, < 12 years old, primary provider

90: Pediatric patient, < 3 years old, primary provider

12: Pediatric patient, < 3 months old, primary provider

15: Intracerebral, endovascular procedure, primary provider

46: Intracerebral, nonvascular open procedure, primary provider

1: Intracerebral, open vascular procedure, primary provider

22: Acute pain consult, new patient

2: Cancer pain consult, new patient

37: Chronic pain consult, new patient

2011 - 2015

Anesthesiology Residency: Airway Management

463: Direct laryngoscopy with curved blade

45: Direct laryngoscopy with straight blade

55: Portex Venn tracheal tube introducer (bougie) assisted intubation

121: Supraglottic airway, laryngeal mask airway, LMA Unique

54: Supraglottic airway, laryngeal mask airway, LMA Classic

21: Supraglottic airway, laryngeal mask airway, LMA Supreme

13: Supraglottic airway, other LMA (Fastrach, Flexible, Proseal)

46: Mask ventilation for procedure, unaided or with oral airway

37: Video laryngoscopy via GlideScope device

34: Indirect laryngoscopy, Shikani optical stylet

5: Video laryngoscopy via McGRATH device

5: Video larvngoscopy via C-MAC device

64: Flexible bronchoscope assisted intubation (53 oral, 7 nasal, 4 via LMA)

17: Flexible bronchoscopy (fiberoptic bronchoscopy alone)

15: Double lumen endotracheal tube placement and positioning via bronchoscope

14: Tracheostomy tube in-situ, with or without exchange for cuffed tracheostomy tube

5: Other techniques (Arndt, Clarus, Nasal airway to circuit, Trachlight)

4: Aintree intubation catheter assisted intubation

2: Tracheostomy, assisted Otolaryngologist