

CURRICULUM VITAE

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92 Pierce Road
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EDUCATION:

<u>Date</u>	<u>Institution</u>	<u>Degree</u>
1986-1990	University of Vermont Burlington, VT	Bachelor of Science Honors in Animal Science
1992-1994	University of Vermont Burlington, VT	Master of Science Animal Science
1996-1997	St. George's School of Medicine West Indies, Grenada	
1997-2000	University of Vermont Burlington, VT	Doctor of Medicine

POST DOCTORAL TRAINING:

<u>Date</u>	<u>Specialty</u>	<u>Institution</u>
2000-2003	Residency, Emergency Medicine	University of Massachusetts Worcester, MA
2002-2003	Chief Resident, Emergency Medicine	University of Massachusetts Worcester, MA
2003-2005	Fellow in Critical Care Medicine, Anesthesiology	Dartmouth-Hitchcock Medical Center Lebanon, NH
2005-2008	Anesthesiology Residency	Dartmouth-Hitchcock Medical Center Lebanon, NH

ACADEMIC APPOINTMENTS:

<u>Date</u>	<u>Academic Title</u>	<u>Institution</u>
2003-2005	Instructor in Medicine	Geisel School of Medicine at Dartmouth
2008-Present		Hanover, NH

2008-Present	Assistant Professor in Anesthesiology	Geisel School of Medicine at Dartmouth Hanover, NH
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DARTMOUTH INSTITUTIONAL LEADERSHIP ROLES

<u>Date</u>	<u>Title</u>	<u>Institution</u>
2008-2020	Director, General Surgery Anesthesiology	Dartmouth Hitchcock Medical Center Lebanon, NH
2011-2015	Associate Medical Director DHART Medical Transport	Dartmouth Hitchcock Medical Center Lebanon, NH
2011-Present	Anesthesiology/Critical Care Fellowship Director	Dartmouth Hitchcock Medical Center Lebanon, NH
2015-2017	Anesthesiology Clinical Director for the Intensive Care Unit	Dartmouth Hitchcock Medical Center Lebanon, NH
2015–2017	Co-Medical Director, Surgery Intensive Care Unit	Dartmouth-Hitchcock Medical Center Lebanon, NH

LICENSURE AND CERTIFICATION:

<u>Date</u>	<u>Licensure/Certification</u>
2001 - 2012	Instructor, Pediatric Advanced Life Support
2003- Present	New Hampshire Medical License
2003 -Present	Ultrasound Instructor Transthoracic Echocardiography, FAST Scan, Aorta Exam, Abdominal
2003 -2015	Instructor, Basic Life Support for Providers
2004-2014	Diplomat, American Board of Emergency Medicine
2003 -Present	Instructor, Advanced Cardiac Life Support
2009-Present	Diplomat, American Board of Anesthesiology
2009-Present	Diplomat, American Board of Anesthesiology Subspecialty Certification in Critical Care Medicine
2010-Present	Testamur, Basic PTEeXAM National Board of Echocardiography
2013-Present	Neurocritical Care Subspecialty Certification (UCNS)
2013-2023	Instructor, Advanced Trauma Life Support

HOSPITAL APPOINTMENTS:

<u>Date</u>	<u>Hospital Title</u>	<u>Institution</u>
2004-2012	Emergency Medicine Staff Physician	Dartmouth Hitchcock Medical Center Lebanon, NH
2008-Present	Critical Care Staff Physician	Dartmouth Hitchcock Medical Center Lebanon, NH
2008-Present	Staff Anesthesiologist	Dartmouth Hitchcock Medical Center Lebanon, NH
2016 –Present	e-ICU Physician based at Dartmouth-Hitchcock Medical Center Lebanon, NH	Avera Health Sioux Falls, SD
2015-2024	LTC AOC 60N M4 405 th FH and 402 nd FST Ft. Devens MA	US Army Medical Professional Management Command
2024-Current	Deputy Commander for Clinical Services Ft. Devens MA	803 RD HC

OTHER PROFESSIONAL POSITIONS:

<u>Date</u>	<u>Position Title</u>	<u>Institution/ Organization</u>
1998-1990	Emergency Care Attendant Instructor	State of Vermont Chittenden County, VT
1988-1994	Rescue Squad Crew Chief Trainer	University of Vermont Burlington, VT
1989-1995	Emergency Medical Technician	State of Vermont Chittenden County, VT
2019-2020	LTC US Army Reserve Forward Surgical Team Afghanistan Combat Deployment 2019-2020 60 N with M4 SI	909 th FST Fort Sheridan, IL
2023-2024	LTC US Army Reserve 60 N (Anesthesiology) Landstuhl Regional Medical Center Landstuhl, Germany	7450 th FWD DET Aurora, CO

TEACHING EXPERIENCE/CURRENT TEACHING RESPONSIBILITIES:

<u>Date</u>	<u>Institution</u>	<u>Course Title</u>	<u>Role</u>	<u>Hours/Year</u>
2003	Dartmouth-Hitchcock Medical Center Lebanon, NH	Continuous Antibiotic Infusion: Is It a Viable Clinical and Economic Option? Critical Care Fellowship Journal Club		2
2003	Dartmouth-Hitchcock Medical Center Lebanon, NH	Heparin and Alteplase vs. Heparin Alone for Submassive Pulmonary Embolus Critical Care Fellowship Journal Club		1
2003	Dartmouth-Hitchcock Medical Center Lebanon, NH	Pressors Resident Lecture Series		6/1
2003	Dartmouth-Hitchcock Medical Center Lebanon, NH	Antibiotics in the ICU Resident Lecture Series		2/1
2004-Current	Dartmouth-Hitchcock Medical Center Lebanon, NH	Sepsis 101 Resident Lecture Series		2/1
2004	Dartmouth-Hitchcock Medical Center Lebanon, NH	Esophageal Doppler an Alternative to the PA Catheter Resident Lecture Series		2/1
2004	Dartmouth-Hitchcock Medical Center Lebanon, NH	Vasopressin vs. Epinephrine in Cardiac Arrest Critical Care Fellowship Journal Club		1
2004	Dartmouth-Hitchcock Medical Center Lebanon, NH	Non-Invasive Positive Pressure Ventilation for Respiratory Failure after Extubation Critical Care Fellowship Journal Club		1
2004	Dartmouth-Hitchcock Medical Center Lebanon, NH	Pre-Hospital Toxicology Management		2/1

		DHART Educational Lecture	
2004	Dartmouth-Hitchcock Medical Center Lebanon, NH	Sepsis Advances in Critical Care Emergency Medicine Update	
2004-Current	Dartmouth-Hitchcock Medical Center Lebanon, NH	Pressors- if you need more Squeeze Resident Lecture Series	2/1
2005	Dartmouth-Hitchcock Medical Center Lebanon, NH	Anesthesia for Eye Surgery CA1-2 Conference	
2006	Dartmouth-Hitchcock Medical Center Lebanon, NH	Pharmacogenomics CA1-2 Conference	
2007	Dartmouth-Hitchcock Medical Center Lebanon, NH	Acid and Base Same Day Nursing Review Course	
2007	Dartmouth-Hitchcock Medical Center Lebanon, NH	Pediatric versus Adult Considerations Fundamental Critical Care Support Course	
2007	Dartmouth-Hitchcock Medical Center Lebanon, NH	Myocardial Ischemia and Infarction Fundamental Critical Care Support Course	
2008	Dartmouth-Hitchcock Medical Center Lebanon, NH	Neurological Changes with Aging CA1-CA2 Conference	
2008	Dartmouth-Hitchcock Medical Center Lebanon, NH	Respiratory Care in Training Airway Management Emergency Medicine	
2009	Dartmouth-Hitchcock Medical Center Lebanon, NH	Central Line Insertion Resident Lecture Series	1/2
2009	Dartmouth-Hitchcock Medical Center	Airway Show and Tell Fellowship Lecture Series	

	Lebanon, NH		
2010	Dartmouth-Hitchcock Medical Center Lebanon, NH	Functional Hemodynamic Parameters in Critical Care Critical Care Grand Rounds	
2010	Dartmouth-Hitchcock Medical Center Lebanon, NH	Toxicology Fellow Lecture Series	1/2
2010	Dartmouth-Hitchcock Medical Center Lebanon, NH	Vasopressor use and selection in the ICU Resident Lecture Series	1/2
2010	Dartmouth-Hitchcock Medical Center Lebanon, NH	The Trauma Airway Resident Lecture Series	1
2010-Current	Dartmouth-Hitchcock Medical Center Lebanon, NH	Arterial Monitoring Anesthesia Resident Lecture Series	1
2010	Dartmouth-Hitchcock Medical Center Lebanon, NH	Goal Directed Therapy in your ICU ICU Fellow Lecture Series	1
2011	Dartmouth-Hitchcock Medical Center Lebanon, NH	Research Conference ICU Fellow Lecture Series	1
2011	Dartmouth-Hitchcock Medical Center Lebanon, NH	Vasopressor use and selection in the ICU Resident Lecture Series	1/2
2012	Dartmouth-Hitchcock Medical Center Lebanon, NH	Advanced Medical Sciences Senior Medical Student Class Hemodynamics	
2013-2021	Dartmouth-Hitchcock Medical Center Lebanon, NH	Advanced Medical Sciences Senior Medical Student Class Shock and its Therapy	1/2
2019-2022	Dartmouth-Hitchcock Medical Center	Advanced Airway Techniques Fellow Lecture and Hands on Series	4

Lebanon, NH

2021-2024	Dartmouth-Hitchcock Medical Center Lebanon, NH	Infection Control in the OR Resident Boot Camp Lecture	1.5
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GRADUATE MEDICAL EDUCATION

<u>DATES</u>	<u>INSTITUTION</u>	<u>COURSE TITLE</u>	<u>ROLE</u>	<u>HOURS/YEAR</u>
2008-Present	Dartmouth-Hitchcock Medical Center Lebanon, NH	Anesthesiology 501 Anesthesiology 410	Teacher	160-240 hrs/year
2008-Present	Dartmouth-Hitchcock Medical Center Lebanon, NH	Anesthesiology 503 Anesthesiology 411 (Critical Care)	Teacher	200 hrs/year

RESEARCH TEACHING/MENTORING:

PI for non-invasive hemodynamic parameters, and functional hemodynamic parameters, as ground work for larger scale hospital wide goal directed study. Mentoring a CA-1 resident through project to encourage postgraduate research.

Matthew Novak M.D.
Kathleen Richards M.D.

Ketafol (propofol and ketamine) induction as agent in OR. PI and mentoring CA2 resident in project including all aspects, literature review, IRB documents, Hitchcock Foundation Funding, and current data collection process.

Nathaniel Schmishney M.D.

Stroke Volume Variation acquisition study, evaluate and obtain raw image data from arterial line and assist and process for NICOM conversion. Comparison among high risk surgical patients intraoperatively.

Kelly Michaelsen, P.h.D.

Anesthesiology Critical Care Fellowship Program Director Mentoring:

Bernd Dotzauer, M.D.	2011
Jeffrey Rosett, M.D.	2011 – 2012
Gregory Weiss, M.D.	2011 – 2012
Christopher Manfred, M.D.	2012 – 2013
William Swartz, M.D.	2012 – 2013
Katherin Sproul, M.D.	2012 – 2013
Zyad Carr, M.D.	2013 – 2014
Kylene Halloran, M.D.	2013 – 2014
Kristin Washburn, M.D.	2013 – 2014
Dawn Barclay, M.D.	2013 – 2014

Daniel Cotoi, M.D.	2014 – 2015
David Donnelly, M.D.	2014 – 2016
Laura Chiang, M.D.	2014 – 2015
James Cappadona, M.D.	2015 – 2016
Matthew Anderson, M.D.	2015 – 2016
Ervin Jakab, M.D.	2015 – 2016
Klifford A. Rocuts Martinez, M.D.	2015 – 2016
Andrew Notarianni, M.D.	2016 – 2017
Julia Peters, M.D.	2016 – 2017
Thomas Pace, M.D.	2016 – 2017
Kristin Root M.D.	2017-2018
Amanda Kore D.O.	2018-2019
Ryan Peterson M.D.	2018-2019
Alex Horne M.D.	2018-2019
Peter Liang M.D.	2018-2019
Johnathan Seligman M.D.	2019-2020
Eleah Porter D.O.	2019-2020
Linzi Moss M.D.	2020-2021
Greg Oudheusden M.D.	2021-2022
Anne-Laure Daussier M.D.	2021-2022
James Park M.D.	2021-2022
Donna Ron M.D.	2021-2022
Robert Tokhunts M.D.	2022-2023
Matthew Carroll M.D.	2022-2023
Alex Heller D. O.	2022-2023
Stephen Lammers	2023-2024
Taylor Conroy	2023-2024
Sarah Jackson	2023-2024
Gerard Kerins	2024-2025
Justin Palmer	2024-2025

Internal Medicine Critical Care Fellowship Mentoring:

Haney Mallemat, M.D.	2008 - 2010
Sinoj John, M.D.	2009 – 2011
Alan Garber, M.D.	2009 – 2010
Kevin Desrosiers, M.D.	2010 – 2011
Mehjabin Zahir, M.D.	2010 – 2011
Teresa Prock, M.D.	2010 – 2012
Adrian Velasquez, M.D.	2011 – 2012
Harris Mobeen, M.D.	2011 – 2012
Kamran Manzoor, M.D.	2012 – 2013
Owais Khawaja, M.D.	2012 – 2013
Pedro Salinas, M.D.	2013 – 2015
Manny Vilchez, M.D.	2014 – 2015
Eileen Bishop, D.O.	2014 – 2016
Matthew Roginski, M.D.	2015 – 2016
Suresh Jillellamudi, M.D.	2016 – 2017
Skyler Lentz, M.D.	2016 – 2017
Sathvik Srikanth M.D.	2017-2019

Roo Atkinson M.D.	2017-2019
Pankaj Bharati M.D.	2017-2019
Stephen Marko M.D.	2018-2020
Coleman Hatton M.D.	2020-2022
Julia Pawlson M.D.	2021-2023

RESEARCH FUNDING:

<u>Date</u>	<u>Project</u>	<u>Role</u>	<u>% Effort</u>	<u>Sponsor</u>	<u>Annual Direct Cost</u>
1996	Skin Cancer Research Grant Skin Imaging	PI	20%	Hitchcock Foundation, Lebanon, NH	\$2,500
2004	Quality Improvement Research Grant Surviving Sepsis	PI	10%	Dartmouth- Hitchcock Medical Center Lebanon, NH	\$3,200
2007	Quality Improvement Research Grant Infection Control in the Anesthesia Workplace	PI	10%	Dartmouth- Hitchcock Medical Center Lebanon, NH	\$3,500
2008	Minimally Invasive Hemodynamic Monitoring (PVI)	PI	10%	Dartmouth- Hitchcock Medical Center Lebanon, NH	\$25,000
2009	Anesthesia Patient Safety Foundation Research Grant Routine Intra-Operative Transmission of Pathogenic Bacterial Organisms	Co PI w/ Loftus	10%	Hitchcock Foundation Lebanon, NH	\$500,000
2013	Sage Intraoperative Hand Hygiene Grant	Co PI w/ Loftus	10%	SAGE Ill, USA	\$450,000
2022	NIH Subaward R01 The BASIC trial: Improving implementation of Evidence-based approaches and surveillance To prevent bacterial transmission and infection	PTE Jeremiah Brown		NIH Bethesda, MD	\$25,000

MAJOR COMMITTEE ASSIGNMENTS AND CONSULTATIONS:**National**

2012-2014 Hospital Engagement Network (HEN) Central line Associated Blood Stream Infection (CLABSI) Content Expert. Presented current state of knowledge of prevention CLABSI and implementation of quality improvement methodology.

2011-2013 STOP SSI Technical Expert Panel-AHRQ to assess and implement a best practice guideline for pre-operative antibiotics in orthopedic and cardiac surgery patients. Division of Healthcare Quality Evaluation, The Joint Commission.

Regional:

<u>Date</u>	<u>Committee</u>	<u>Role</u>	<u>Institution</u>
1994-1995	American Cancer Society Board	Member	American Cancer Society Lebanon, NH

Institutional:

<u>Date</u>	<u>Committee</u>	<u>Role</u>	<u>Institution</u>
2008	Revised Perioperative Committee	Member	Dartmouth-Hitchcock Medical Center Lebanon, NH
2008-Present	Anesthesiology Equipment Committee	Member	Dartmouth-Hitchcock Medical Center Lebanon, NH
2009-Present	ICU Ultrasound Committee	Coordinator	Dartmouth-Hitchcock Medical Center Lebanon, NH
2010-Present	Anesthesiology Cost Containment Committee	Member	Dartmouth-Hitchcock Medical Center Lebanon, NH
2010-2013	On-Doctoring	Mentor	Dartmouth-Hitchcock Medical Center Lebanon, NH
2013-Present	Committee Anesthesia Research Evidence	Member	Dartmouth-Hitchcock Medical Center Lebanon, NH
2013-Present	Hospitalist Chair Search Committee		Dartmouth-Hitchcock Medical Center Lebanon, NH
2013-Present	Trauma Candidate Search Committee		Dartmouth-Hitchcock Medical Center Lebanon, NH
2014	Pulmonary Critical Care Candidate Search Committee		Dartmouth-Hitchcock Medical Center Lebanon, NH
2015	Anesthesiology Executive Council		Dartmouth-Hitchcock Medical Center Lebanon, NH
2018-2021	Geisel School of Medicine at Geisel Medical School Interview Committee		Hanover, NH

MEMBERSHIP, OFFICE & COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:

<u>Date</u>	<u>Society</u>	<u>Role</u>
1999	American Medical Informatics Association	Member
2000	American College of Emergency Physicians	Member
2000- Present	Alpha Omega Alpha Society	Member
2003- Present	Society of Critical Care Medicine	Member
2003- Present	CHEST	Member
2005- Present	American Society of Anesthesiologists	Member

JOURNAL REFEREE ACTIVITIES:

<u>Date</u>	<u>Journal Name</u>
2008-Present	Journal of Intensive Care Medicine
2008-Present	Anesthesiology
2009-Present	Minerva Anesthesiologica

AWARDS AND HONORS:

<u>Date</u>	<u>Award Name</u>
1996	Hitchcock Foundation Competitive Research Grant Principal Investigator, Skin Cancer Research Dartmouth–Hitchcock Medical Center, Lebanon, NH
1996	Microbiology Class Award University of Vermont, Burlington, VT
2004	Quality Research Grant Program, “Surviving Sepsis,” Dartmouth–Hitchcock Medical Center, Lebanon, NH
2007	Quality Research Grant Program, Infection Control in the Anesthesia Workspace Dartmouth–Hitchcock Medical Center, Lebanon, NH
2008	Teaching Award Department of Internal Medicine Dartmouth–Hitchcock Medical Center, Lebanon, NH, December 2008
2020	Army Commendation Medal with Combat
2018/2020/2024	Army Achievement Medal (3)
2019/2020/2023	Army Reserve Component Achievement Medal (3)
2020	National Defense Service Medal
2020	NATO Medal
2020	Global War on Terror Medal

INVITED PRESENTATIONS**International:**

<u>Date</u>	<u>Topic/Title</u>	<u>Organization</u>	<u>Location</u>
2014	Critical Care Ultrasound The Graduated Curriculum	Critical Care Ultrasound Symposium	Santa Cabrini Hospital Montreal, QUE
2024	Infection Control in the Anesthesia Workspace Implications and Adjustments	Landstuhl Regional Medical Center	LRMC Landstuhl, Germany
2024	MPOG and other Reporting Metrics for our Practice	Landstuhl Regional Medical Center	LRMC Landstuhl, Germany

National:

<u>Date</u>	<u>Topic/Title</u>	<u>Organization</u>	<u>Location</u>
1994	Transduction of Epithelial Cells By a Retroviral Vector Containing Bovine β - lactoglobulin Gene American Society of Animal Science Annual Meeting		Baltimore, MD
1999	Invited Speaker MEDSPANISH - A Language Tool for the Emergency Department American	Medical Informatics National Annual Meeting	Washington, DC
2004	Providing Critical Care at the Bedside: Solutions to the Leapfrog	American College of Chest Physicians	Seattle, WA
2012	Infection Control in your OR	Association for Professionals in Infection Control and Epidemiology National Meeting	San Antonio, Texas
2015	Enhanced Recovery Nuts and Bolts	World Congress of Enhanced Recovery	Washington D.C.

Regional/Local:

<u>Date</u>	<u>Topic/Title</u>	<u>Organization</u>	<u>Location</u>
2004	Sepsis in Your Emergency Department	Managing Medical Emergencies Regional Conference	Dartmouth-Hitchcock Medical Center Lebanon, NH
2004	Sepsis-Current Diagnosis and Treatment	Emergency Medicine Grand Rounds	Maine Medical Center Portland, Maine

2006	Changing Paradigms in Use of Pressor Agents	Managing Medical Emergencies Regional Conference	Dartmouth-Hitchcock Medical Center Lebanon, NH
2006	Critical Care Update	New Hampshire ASA Annual Conference	Dartmouth-Hitchcock Medical Center Lebanon, NH
2007	Sepsis: Current Identification and Treatment	Respiratory Care Conference	Dartmouth-Hitchcock Medical Center Lebanon, NH
2007	Reduction of Bacterial Transmission in Our Patients is Within Our Grasp	Anesthesiology Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2007	Sepsis: What to do During Transport	New England Regional Airmedical Conference	Lake Morley Resort Fairlee, VT
2008	Second Annual New England Anesthesiology Residents Conference in the Midst of Research	New England Anesthesia Residents Conference	Dartmouth-Hitchcock Medical Center Lebanon, NH
2008	Sepsis and Vasopressor Usage	Littleton Regional Hospital Grand Rounds	Littleton Regional Hospital Whitefield, NH
2009	Sepsis	Upper Connecticut River Valley Regional Hospital Grand Rounds	Upper Connecticut River Valley Regional Hospital Claremont, NH
2010	Functional Hemodynamic Parameters in Critical Care	Critical Care Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2011	Goal Directed Therapy in Your OR	Brigham and Women's Hospital Anesthesiology Grand Rounds	Brigham and Women's Hospital Boston, MA
2012	Infection Control in Your OR	Association for Professionals in Infection Control and Epidemiology National Meeting	San Antonio, TX
2013	Infection Control and Anesthesia	New York University School of Medicine Grand Rounds	New York University School of Medicine Manhattan, NY
2013	Infection Control in the OR	Department of Anesthesiology, Surgery,	Rhode Island Hospital Providence, RI

		and Medicine Combined Grand Rounds	
2013	Infection Control in the OR Things You Need to Know	Anesthesia Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2014	Goal Directed Therapy in your OR	Maine Medical Center Grand Rounds	Maine Medical Center Portland, ME
2015	Goal Directed Therapy in your OR	Surgery Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2017	TeleICU	Anesthesia Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2020	Anesthesiology in Eastern Afghanistan	Anesthesia Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2020	Testing in COVID-19	Anesthesia Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2021	Infection Control in Anesthesiology	Anesthesia Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2022	Military Medicine	405 th FH Invited Speaker	West Hartford, CT
2022	Goal Directed Therapies In Your OR	Anesthesia Grand Rounds	University of Iowa
2024	BASIC Trial	Anesthesia Grand Rounds	Dartmouth-Hitchcock Medical Center Lebanon, NH
2024	Military Medicine in Eastern Afghanistan: Facilitating Respiratory Support.	Advanced Concepts in Respiratory Care	Dartmouth-Hitchcock Medical Center Lebanon, NH

BIBLIOGRAPHY**A. Peer-Reviewed Publications in Print or Other Media**

Original Articles:

1. **Koff MD**, Plaut K. Transforming Growth Factor- α Like Messenger Ribonucleic Acid in the Bovine Mammary Gland. *J Dairy Science*. 1995; 78:1903-1908.
2. Karagas MR, Spencer SK, Weinstock MA, Kuypers J, **Koff MD**, Greenberg ER. Rarity of HPV in Non-Melanoma Skin Cancer Among Immunocompetent Patients. *J. Cut Med and Surg*. 1997; 2:1.
3. Lopez AM, Wallace L, Dorr RT, **Koff MD**, Hersh E, Alberts DS. Topical DMSO Treatment for Pegylated Liposomal Doxorubicin-Induced Palmar-Plantar Erythrodysesthesia. *Cancer Chemotherapy and Pharmacology*. 1999; 44:303-306.
4. **Koff MD**, Cohen JA, McIntyre JJ, Carr CF, Sites BD. Severe brachial plexopathy after an ultrasound-guided single-injection nerve block for total shoulder arthroplasty in a patient with multiple sclerosis. *Anesthesiology*. 2008; 108(2): 325-328.
5. Loftus R, **Koff MD**, Burchman CA, Beach ML. Transmission of multidrug resistant bacterial organisms in the anesthesia work area. *Anesthesiology*. Sep 2008; 109(3):399-407
6. **Koff MD**, Loftus RW, Burchman CC, et al. Reduction in intraoperative bacterial contamination of peripheral intravenous tubing through the use of a novel device. *Anesthesiology*. 2009 May; 110(5): 978-985.
7. John SK, Rangan Y, Block CA, **Koff MD**. Life-threatening hyperkalemia from nutritional supplements: uncommon or undiagnosed? *Am J Emerg Med*. 2010 Nov; 29(9): 1237.
8. Loftus RW, Muffly MK, Brown JR, Beach ML, **Koff MD**, Corwin HL, Surgenor SD, Kirkland KB, Yeager MP. "PATIENT SAFETY (Anesthesia Patient Safety Foundation) Hand Contamination of Anesthesia Providers Is an Important Risk Factor for Intraoperative Bacterial Transmission." *Anesth Analg*. 2011; 112(1): 98.
9. Loftus RW, Muffly MK, Brown JR, Beach ML, **Koff MD**, Corwin HL, Surgenor SD, Kirkland KB, Yeager MP. Hand contamination of anesthesia providers is an important risk factor for intraoperative bacterial transmission. *Anesth Analg*. 2011 Jan; 112(1):98-105.
10. **Koff MD**, Loftus RW, Corwin H, Beach ML. Reduction in Ventilator Associated Pneumonias in a mixed ICU using a Novel Hand Hygiene System. *J Crit Care*. 2011; 26: 489-95.
11. Smischney NJ, Beach ML, Loftus RW, Dodds TM, **Koff MD**. MS Ketamine/propofol admixture (ketofol) is associated with improved hemodynamics as an induction agent: A randomized, controlled trial. *Journal of Trauma and Acute Care Surgery*. 2012; 73(1): 94–101.
12. Loftus RW, Muffly MK, Brown JR, **Koff MD**. Hand contamination of anesthesia providers is an important risk factor for intraoperative bacterial transmission. *Anesth Analg*. 2011; 112: 98–105.
13. Loftus RW, Brown JR, **Koff MD**, Reddy S, Heard SO, Patel HM, Fernandez PG, Beach ML, Corwin HL, Jensen JT, Kispert D, Huysman B, Dodds TM, Ruoff KL, Yeager MP. Multiple reservoirs contribute to intraoperative bacterial transmission. *Anesth Analg*. 2012 Jun; 114(6):1236-48. Epub 2012 Mar 30.

14. Loftus RW, Patel HM, Huysman BC, Kispert DP, **Koff MD**, Gallagher JD, Jensen JT, Rowlands J, Reddy S, Dodds TM, Yeager MP, Ruoff KL, Surgenor SD, Brown JR. Prevention of intravenous bacterial infection from health care provider hands: the importance of catheter design and handling. *Anesth Analg*. 2012 Nov; 115(5): 1109-19.
15. Loftus RW, Brindeiro BS, Kispert DP, Patel HM, **Koff MD**, Jensen JT, Dodds TM, Yeager MP, Ruoff KL, Gallagher JD, Beach ML, Brown JR. Reduction in intraoperative bacterial contamination of peripheral intravenous tubing through the use of a passive catheter care system. *Anesth Analg*. 2012 Dec; 115(6): 1315-23.
16. Loftus RW, Brown JR, Koff MD, Reddy S, Heard SO, Patel HM, Fernandez PG et al. "PATIENT SAFETY (Anesthesia Patient Safety Foundation)-CME-Multiple Reservoirs Contribute to Intraoperative Bacterial Transmission." *Anes Analg*. 2012; 114(6): 1236.
17. Loftus RW, **Koff MD**, Brown JR, Patel HM, Reddy S, Ruoff KL. Transmission Dynamics of Gram Negative Bacterial Pathogens in the Anesthesia Work Area. *Anes Analg*. 2015 Apr; 120(4): 819-826.
18. Loftus RW, Brown JR, Yeager MP, **Koff MD**. The Epidemiology of Perioperative *Staphylococcus aureus*: Phenotypic Association with Intraoperative Transmission Events, Antibiotic Resistance, and Subsequent Infection Development. *Anes Analg*. 2015 Apr; 120(4): 807-818.
19. Fernandez PG, Loftus RW, Dodds TM, **Koff MD**, et al. Hand Hygiene Knowledge and Perceptions Among Anesthesia Providers. *Anesth Analg*. 2015 Apr; 120(4): 837-843.
20. Loftus RW, **Koff MD**, Brown JR, et al. The Epidemiology of Staphylococcus Aureus Transmission in the Anesthesia Work Area. *Anesth Analg*. 2015 April; 120(4): 807-818.
21. Loftus RW, **Koff MD**, Brown JR, et al. The Dynamics of Enterococcus Transmission from Bacterial Reservoirs Commonly Encountered by Anesthesia Providers. *Anesth Analg*. 2015 Apr; 120(4): 827-836.
22. Koff MD, Brown JR, Marshall EJ, O'Malley AJ, Jensen JT, Heard SO, Longtine K, O'Neill M, Longtine J, Houston D, Robison C, Moulton E, Patel HM, Loftus RW., Frequency of Hand Decontamination of Intraoperative Providers and Reduction of Postoperative Healthcare-Associated Infections: A Randomized Clinical Trial of a Novel Hand Hygiene System, *Infect Control Hosp Epidemiol*. 2016 Aug;37(8):888-95
23. Sharma, A., Fernandez, P.G., Rowlands, J.P. **Koff, M.D.** Perioperative Infection Transmission: the Role of the Anesthesia Provider in Infection Control and Healthcare-Associated Infections. *Curr Anesthesiol Rep* **10**, 233–241 (2020).
24. Wall, R M.D. Dexter, F **Koff, M.D.**, Loftus, R.W. Effectiveness and feasibility of an evidence-based intraoperative infection control program targeting improved basic measures: a post-implementation prospective case-cohort study. *Journal of Clinical Anesthesia* Vol 77 May 2022
25. Epidemiology of Enterococcus, Staphylococcus aureus, Klebsiella, Acinetobacter, Pseudomonas,

and Enterobacter Species Transmission in the Pediatric Anesthesia Work Area

PG Fernandez, F Dexter, J Brown, G Whitney, MD Koff, S Cao, RW Loftus Anesthesia & Analgesia 138 (1), 152-160

26. Role of Anesthesia Providers in Infection Control Loftus,RW Dexter,F Koff, MD and Charnin, JE ASA monitor, Vol.88(1), pp.1-9 01/01/2024 DOI: 10.1097/01.ASM.0001004720.63302.ac
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2. Loftus RW, **Koff MD**, Birnbach DJ. The Dynamics and Implications of Bacterial Transmission Events Arising from the Anesthesia Work Area. *Anes Analg*. 2015 Apr; 120(4): 853-860.
3. Archit,S,, **Koff, MD**, Fernandez, P, Rowlands, J ,Loftus, RW Perioperative Infection Transmission: The role of the anesthesia provider in infection control and healthcare-associated infections, submitted for publication American Journal of Infection Control, 2020

Book Chapters:

1. **Koff MD**, Loftus RW, Herwaldt LA. Section VIII. Epidemiology and Prevention of Nosocomial Infections Associated with Diagnostic and Therapeutic Procedures Nosocomial Infections Associated with Anesthesia. *Hospital Epidemiology and Infection Control*. 4th Edition. 2012;
2. **Koff MD**. Toxicology and Support of Patients with Drug Overdoses, Resident's Guide to Learning in the Intensive Care Unit Ed. Heard Park Ridge: American Society of Critical Care Anesthesiologists 5th edition. 2014; 200-205.

3. **Koff M.D.** Smoke Inhalation after house fire, Critical Care Medicine Review: A Problem Based Learning Approach edited by Dr. Taylor Johnson, Dr. Steven Miller, and Dr. Eric Wilkens under preparation 2018

B. Other Scholarly Work in Print or Other Media Including Editorially-Reviewed Publications

Video Publications

1. **Esophageal Doppler Insertion** *AccessAnesthesiology* 2013
2. **Esophageal Doppler Overview** *AccessAnesthesiology* 2013
3. **Esophageal Doppler Case Interpretation** *AccessAnesthesiology* 2013
4. **LIDCO Rapid Use and Interpretation** Accepted *AccessAnesthesiology* under revision 2014
5. **Intra-operative Fluid Responsiveness** *AccessAnesthesiology* 2014

C. Abstracts:

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2. **Koff MD**, Plaut K. "Temporal Expression of Bovine TGF- α mRNA in Pregnant Mammary Tissue." Abstract. *J Dairy Science* (1993) 76: 48.
3. **Koff MD**, Plaut K, Zwiebel J, Batt C, Brandon RD. "Transduction of Epithelial Cells by a Retroviral Vector Containing Bovine β -lactoglobulin Gene." *J Animal Science* (1994) 72: 52.
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5. Burchman CA, Loftus RW, Henry E, **Koff MD**. "A Prospective Observational Study of Hand washing Behavior in Anesthesia Providers: Analysis and Implications." Presented, European Society of Anesthesia, 2007.
6. **Koff MD**, Loftus R, Burchman CA, Hogan D, Beach ML. "Microbial Contamination in the Anesthesia Workspace. Are we as Clean as We Think?" *Anesthesiology* (2007) 107: A1788.
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11. Koff MD, Corwin H, Mroz I, Surgenor SD, Loftus RW. "Reduction in Healthcare Associated Infections by a Novel Hand Hygiene System in a Mixed Patient ICU." Presented, ASA Annual Meeting, New Orleans, Louisiana, 2009.
12. Sinoj J, **Koff MD**. "No Salt, No Danger? Unique Case of Near-Fatal Hyperkalemia from Salt Substitute." Presented, Society for Critical Care Medicine, San Diego, California, 2010.
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14. Richard KM, Novak MR, Quill TJ, Cannesson M, **Koff MD**. "Functional hemodynamics during high risk abdominal surgery: are all monitors created equal?" Presented, ASA Annual Meeting, San Diego, California, 2010.
15. Richard KM, Quill TJ, Surgenor SD, Trummel JM, **Koff MD**. "Evaluation of non-invasive hemoglobin measurements in high risk surgical patients." Presented, ASA Annual Meeting, San Diego, California, 2010.
16. Richard KM, Novak MR, Cannesson M, Loftus RW, **Koff MD**. "Accuracy of intra-operative manual calculation of PPV; is a \$10,000 monitor really necessary?" Presented, ASA Annual Meeting, San Diego, California, 2010.
17. Richard KM, Novak MR, Dodds TM, Loftus RW, **Koff MD**. "Non-invasive oxygen delivery index: is this the future of goal directed therapy?" Presented, ASA Annual Meeting, San Diego, California, 2010.
18. **Koff MD**, Richard KM, Novak MR, Cannesson M, Dodds TM. "Elevated PPV predicts and increased length of stay and morbidity during high risk abdominal surgery." Presented, ASA Annual Meeting, San Diego, California, 2010.
19. **Koff MD**, Novak MR, Richard KM, Loftus RW, Cannesson M. "Crossing the threshold to give a fluid bolus; do we all agree?" Presented, ASA Annual Meeting, San Diego, California, 2010.
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23. Fernandez PG, **Koff MD**, Beach ML, Loftus RW, Reddy S. "Perioperative Hand Hygiene: A Survey of Knowledge and Perceptions Among Anesthesia Providers." Presented, ASA Annual Meeting, Chicago, Illinois, 2011.
24. Patel HM, Loftus RW, Dodds TM, **Koff MD**, Brown JR, Reddy S. "Multiple Reservoirs Contribute to Intraoperative Bacterial Stopcock Contamination." Presented, ASA Annual Meeting, Chicago, Illinois, 2011.
25. Loftus RW, Rowlands JP, **Koff MD**, Brown JR, Reddy S. "The Surrounding Patient Environment is an Important Contributor to Intraoperative Patient Intravenous Stopcock Contamination." Presented, ASA Annual Meeting, Chicago, Illinois, 2011.
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27. **Koff MD**, Smischney NJ, Carchedi M, Loftus RW. "Hemodynamic Effects of Ketofol as a Sole Induction Agent in Low-Risk Patients." Presented, ASA Annual Meeting, Chicago, Illinois, 2011.
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29. Smischney NJ, Beach ML, Dodds TM, **Koff MD**. "Ketofol as a Sole Induction Agent is Associated with Increased Hemodynamic Indices in Low-Risk Patients." Presented, ASA Annual Meeting, Chicago, Illinois, 2011.
30. Smischney NJ, Beach ML, Metzler SR, **Koff MD**. "Ketofol May be Associated with Better Pain Control and Without Increased Risk of Nausea and Vomiting." Presented, ASA Annual Meeting, Chicago, Illinois, 2011.
31. Holubar S, Siegel C, **Koff MD**. "Enhanced Recovery after Surgery: Does a Diagnosis of Inflammatory Bowel Disease Predict Increased Length of Stay?" Presented, American Society of Colon and Rectal Surgeons Annual Meeting, Vancouver, Canada, 2011.
32. Zyad C, Carroll J, **Koff M** Central Pontine Myelinolysis Precipitated By Hyperosmolarity In A Patient With Group B Streptococcal Septicemia: Acute And Convalescent Imaging Presented. American Thoracic Society Annual Meeting, Denver, Colorado, 2015
33. Kirans, G Conroy, T Morley, B **Koff, M D** Management of Complex Multi-day Anesthetic for Hybrid Neurosurgical and Thoracic Oncology. ASA Annual Meeting New Orleans, LA 2022

A handwritten signature in black ink, reading "Matthew D. Koff". The signature is written in a cursive, flowing style with a large initial 'M' and a distinct 'K'.

Updated: Monday, August 11, 2025

By: Matthew D. Koff M.D. M.S.