

CURRICULUM VITAE

I. Personal Information

Name

Matthew Kurt Muffly

Work Address

Stanford University Medical Center
Department of Anesthesiology, Perioperative, and Pain Medicine
Stanford, CA 94304

Email

mmuffly@stanford.edu

II. Educational Background

University

1998-2002	B.A. (Environmental, Population, and Organismic Biology), B.A. (Philosophy), University of Colorado, Boulder, CO
2002-2006	M.D., Jefferson Medical College, Philadelphia PA
2017-2019	Master of Science, Health Policy, Stanford University, Stanford, CA

Post-Graduate Training

2006-2007	Internship, Internal Medicine, Lankenau Medical Center, Wynnewood, PA
2007-2010	Residency, Anesthesiology, Dartmouth Hitchcock Medical Center, Lebanon NH
2010-2011	Pediatric Anesthesiology Fellowship, University of Chicago, Chicago IL
2015-2016	Quality Improvement/Patient Safety Fellowship, Department of Anesthesiology, Perioperative, and Pain Medicine, Stanford University Medical Center, Stanford, CA

Board Certification

2011	ABA, Board Certified Anesthesiology
2011	Testamur in Advanced Perioperative Transesophageal Echocardiography
2014	ABA, Board Certified Pediatric Anesthesiology

Licensure

2014 to present Medical Board of California #131755

Clinical Practice

2011- 2013 Pediatric Cardiac Anesthesiologist; Advocate Medical Center, Oak Lawn, IL
2013-2014 Pediatric Anesthesiologist; Swedish Medical Center, Englewood, CO
2015-present Pediatric Anesthesiologist; Lucille Packard Childrens Hospital, Stanford, CA

III. Professional Appointments

2015 Clinical Instructor; Lucile-Packard Children's Hospital, Stanford University, Stanford, CA
2016-Present Clinical Assistant Professor; Lucile-Packard Children's Hospital, Stanford University, Stanford, CA

IV. Honors and Awards

2008 FAER Research Scholar Award, Dartmouth-Hitchcock Medical Center
2010 Excellence in Research Award, Dartmouth-Hitchcock Medical Center
2010 Young Investigator Award, Dartmouth-Hitchcock Medical Center
2016 Society for Pediatric Anesthesia Young Turk
2018 Society for Pediatric Anesthesia Best Article Mention of 2017-2018
2019 Society for Pediatric Anesthesia Best Article Mention of 2018-2019

V. National Committees

2018 – Present ASA Ad Hoc Committee on Anesthesia Workforce
2016 – Present SPA Quality and Safety Committee
2019 – Present Committee on Pediatric Anesthesia, ASA Subgroup
- Leader of special interest group on Workforce Trends in Pediatric Anesthesia

V. Scholarly Publications

Peer Reviewed Original Research Papers, Published

Muffly MK, Beach ML, Tong YC, Yeager MP. Stopcock lumen contamination does not reflect the full burden of bacterial intravenous tubing contamination: analysis using a novel injection port. Am J Infect Control. 2010 Nov;38(9):734-9.

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.

Cravero JP, **Muffly M**. Abdominal compartment syndrome complicating posterior spinal fusion. *Paediatr Anaesth*. 2012 Mar;22(3):278-80.

Muffly MK, Muffly TM, Weterings R, Singleton M, Honkanen A. The Current Landscape of US Pediatric Anesthesiologists: Demographic Characteristics and Geographic Distribution. *Anesth Analg*. 2016 Jul;123(1):179-85.

Muffly MK, Medeiros D, Muffly TM, Singleton MA, Honkanen A. The Geographic Distribution of Pediatric Anesthesiologists Relative to the U.S. Pediatric Population. *Anesth Analg*. 2016 Dec 14

Williams GD, **Muffly MK**, Mendoza J, Wixon N, Leong K, Claire R. Reporting of Perioperative Adverse Events by Pediatric Anesthesiologists at a Tertiary Children's Hospital: Targeted Interventions to Increase the Rate of Reporting. *Anesth Analg*. 2017 Jul 1. doi: 10.1213/ANE.0000000000002208

Muffly MK, Chen MI, Claire RE, Drover DR, Efron B, Fitch WL, Hammer GB. Small-Volume Injections: Evaluation of Volume Administration Deviation From Intended Injection Volumes. *Anesth Analg*. 2017 Mar 23.

Muffly M, Honkanen A, Singleton M. In Response, Letter to the Editor *Anesth Analg*. 2017 Aug;125(2):692-693.

Muffly MK, Singleton MA, Scheinker D, Miller D, Agarwal R, Furukawa L, Muffly TM, Honkanen A. The Pediatric Anesthesiology Workforce: Projecting Supply and Trends 2015-2035. *Anes Analg*, 126(2):568-578, February 2018.

Muffly MK, Ku Andrew, Drover D, Rodriguez S, Caruso T, Ku Anne, Tsui B. "Speeding the Detection of Vessel Cannulation: An In-Vitro Stimulation Study." *Anesth Analg* **130**(1): 159-164.

Muffly MK, Scheinker D, Muffly T, Singleton M, Agarwal R, Honkanen A. Practice Characteristics of Board-certified Pediatric Anesthesiologists in the US: A Nationwide Survey. *Cureus*. 2019;11(9):e5745.

Muffly MK, Honkanen A, Scheinker D, Wang T, Saynina O, Singleton M, Wang CJ, Sanders L. Hospital Utilization Trends for Inpatient Surgery and

Procedures in California: 2000 – 2016. Anes Analg. 2019; Published Ahead of Print

Muffly M, Loftus R, Yeager M. Letter to the Editor. Anesth Analg. 2020; Accepted for Publication

Abstracts; Poster Presentations

Muffly M, Fernandez P. The Challenge of Practicing Pediatric Anesthesia in An Adult Community Hospital: Communication Failures, Poison Control, and Risk Management Notification. Society for Pediatric Anesthesia; 2015.

Muffly M, Caruso T, Williams G. Barriers to Self-Reporting Critical Incidents in a Quality Improvement System. American Society of Anesthesiologists Meeting; October 2015

Muffly M, Muffly T, Wetterings R, Honkanen A. The Uneven Landscape of Pediatric Anesthesiologists: Variations in Geographic Distribution in the United States. Stanford Department of Anesthesiology Research Awards Dinner; May 2015.

Muffly M, Chen M, Claire R, Drover D, Hammer G. Proceed with Caution: Dramatic Dose Variation with small volume injections. Society for Pediatric Anesthesia, Colorado Springs, CO; April 2016.

Muffly M, Chen M, Claire R, Drover D, Hammer G. Proceed with Caution: Dramatic Dose Variation with small volume injections. Stanford Department of Anesthesiology Research Awards Dinner; 2017.

Muffly MK, Singleton MA, Scheinker D, Miller D, Agarwal R, Furukawa L, Muffly TM, Honkanen A. The Pediatric Anesthesiology Workforce: Projecting Supply and Trends 2015-2035. Society for Pediatric Anesthesia, Austin, TX; April 2017.

Muffly MK, Ku A, Rodriguez S, Caruso T, Drover D, Tsui B. Speeding the detection of vessel cannulation: an in-vitro stimulation study SPA 4/2018.

PBLDs:

Muffly M, Binstock W. Decreased Amplitude and Increased Latency in OR Communication During Posterior Spinal Fusion. Society for Pediatric Anesthesia Phoenix, AZ. April 2012

Honkanen A, **Muffly M**. Lessons in Process Improvement: What works and What Doesn't! California Society for Anesthesiologists. San Francisco, CA. April 2015

Wang T, **Muffly M**. Caught by the perioperative clinic: Complementary medicine complicating spinal fusion surgery. Society for Pediatric Anesthesia. April 2017

Patent(s):

Patent Application #PCT/US2009/030722: Medical fluid coupling port with guide for reduction of contamination, Jan 12, 2009. Dartmouth Hitchcock Clinic, **Matthew K Muffly**

VI. Editorial Service

Journal Reviewer

2015 to present Anesthesia & Analgesia
2015 to present Pediatric Anesthesiology
2017 to present British Medical Journal

VII. University Administrative Service

Divisional Responsibilities

2015 to present Co-Chair Morbidity and Mortality Conference
2015 - 2017 Member Pediatric Anesthesia Safety Committee

Mentorship Responsibilities

2017 to present Childhood Anxiety Reduction Through Innovation and Technology Mentor for Undergraduate Research Internship

2017 Research Mentees:

1. Andrew Ku (Undergraduate, Bard College, MA): Determining the Ideal Method for Detecting Intravascular Placement of Intravenous Catheter; *SPA Abstract, 2018*
2. Amitha Ganti (OB/Gyn Resident, Stanford): Reporting Trends in Teenage Pregnancy in California: 2000 - 2016

VIII. Professional Society Memberships

American Society of Anesthesiology
Society for Pediatric Anesthesiology

IX. Invited Lectures and Seminars

- 2015 Barriers to Self-Reporting Critical Incidents in a Quality Improvement System; Pediatric Anesthesia Annual Division Meeting
- 2016 Pediatric Anesthesia Safety Committee: Small-Volume Injections: Evaluation of Volume Administration Deviation From Intended Injection Volumes
- 2016 Cardiovascular ICU Local Improvement Team Meeting: Small-Volume Injections: Evaluation of Volume Administration Deviation From Intended Injection Volumes
- 2016 Lucile Packard Patient Safety Committee (Invited by Cassie Bergero): Small-Volume Injections: Evaluation of Volume Administration Deviation From Intended Injection Volumes
- 2016 Wake Up Safe: Implementation of Perioperative Posterior Spinal Fusion Pathway
- 10/2017 Visiting Professor:
University of California, San Francisco; Benioff Children's Hospital: The Pediatric Anesthesiology Workforce: Projecting Supply and Trends 2015-2035. San Francisco, CA
- 11/2017 Invited Presentation:
Pediatric Anesthesiology Leadership Council: The Pediatric Anesthesiology Workforce: Projecting Supply and Trends 2015-2035. Chicago, IL
- 1/2018 Visiting Professor:
Ultrasound-Guided Central Line Placement; Hospital Luis Vernaza, Guayaquil, Ecuador (given in Spanish)
- 1/2018 Visiting Professor:
Ultrasound-Guided Upper Extremity Nerve Blocks; Hospital Luis Vernaza, Guayaquil, Ecuador (given in Spanish)
- 2/2018 Stanford University Fellow Lecture Series:
The Pediatric Anesthesiology Workforce: Projecting Supply and Trends 2015-2035.
- 3/2018 Anesthesia Residents Lecture Series: URIs
- 3/2019 Lecture to SPA Subgroup on GME Workforce
- 10/2019 Presentation to ASA Committee on Pediatric Anesthesia Workforce Trends (Orlando, FL)

4/2020

Department of Anesthesiology Grand Rounds: Presentation on
Research Activities