AMIT S. PADAKI, MD, MS

CURRICULUM VITAE

EDUCATION

MS	Stanford University Master of Science Management Science and Engineering Stanford, California	Expected 2027
MD	Johns Hopkins University School of Medicine Doctor of Medicine Baltimore, Maryland	2012
MS	Pennsylvania State University Master of Science – Physiology University Park, Pennsylvania	2007
BS	Pennsylvania State University Schreyer Honors College Bachelor of Science – Bioengineering University Park, Pennsylvania	2006

POST-GRADUATE MEDICAL TRAINING

Fellowship in Extreme Environmental Medicine — 2016
George Washington University
Washington, DC

Residency in Emergency Medicine — 2015
Vanderbilt University Medical Center
Nashville, Tennessee

PROFESSIONAL EXPERIENCE

Christiana Care Health System Emergency Department — 2025-present
Attending Physician
Newark, DE

Biodynamic Research Corporation
12810 West Golden Lane
San Antonio, TX 78249-2231
www.brconline.com
210.691.0281

Biodynamic Research Corporation Consultant San Antonio, Texas	2024-present
Baylor College of Medicine Emergency Department Attending Physician Houston, TX	2022-2026
HealthForce Partners Consultant Bothell, Washington	2023-2025
Christiana Care Health System Emergency Department Attending Physician Newark, Delaware	2017-2022
Thomas Jefferson University Hospital Emergency Department Attending Physician Philadelphia, Pennsylvania	2016-2017
VA Medical Center Emergency Department Attending Physician Washington, DC	2015-2016
Cookeville Regional Medicine Center Emergency Department Attending Physician	2015

CONTINUING EDUCATION

Traffic Crash Reconstruction II – Online Northwestern University Center for Public Safety Evanston, IL	2026
SAE International Vehicle Crash Reconstruction: Principles and Technology Fairfax, VA	2025
Traffic Crash Reconstruction I - Online Northwestern University Center for Public Safety Evanston, IL	2025

Board Certifications

American Board of Emergency Medicine	2016-present

Medical Licensures

Delaware Board of Medical Licensure [C1-0028213]	2025-present
Pennsylvania State Board of Medicine [MD457468]	2025-present
Inactive Medical Licenses: DC, MD, NJ, TN, TX	

Professional Registrations

Fellow, American Academy of Emergency Medicine	2022-present
Fellow, American College of Emergency Physicians	2021-present
Fellow, Academy of Wilderness Medicine	2018-present

Professional Affiliations

ASTM International	2026-present
Committee F47 on Commercial Spaceflight	2026-present
Society of Automotive Engineers	2025-present
Organization for Space Medicine, Engineering, and Design	2024-present
Vice Chair, Education and Training Committee	2024-2025

Other Training/Certifications

NDLSF Advanced Disaster Life Support	2023
AEMRC/AACT Advanced Hazmat Life Support	2023
ACS Disaster Management and Emergency Preparedness	2023
FAA Aviation Medical Examiner Training	2016
WMS Advanced Wilderness Life Support	2015
UHMS Primary Training in Hyperbaric Medicine	2015
FEMA Urban Search and Rescue Training	2015
NOAA/UHMS Physicians Training in Diving Medicine	2015
ACS Advanced Trauma Life Support Instructor	2014

Academic Appointments

Associate Professor	2024-2026
Baylor College of Medicine	
Center for Space Medicine	

Associate Professor Baylor College of Medicine Department of Emergency Medicine	2023-2026
Space Medicine Fellowship Core Faculty Baylor College of Medicine	2023-2025
Space Medicine Fellowship Research Director Baylor College of Medicine	2023-2025
Wilderness Medicine Course Director Baylor College of Medicine	2023-2024
Assistant Professor Baylor College of Medicine Department of Emergency Medicine	2022-2023
Visiting Professor Aster Hospital System and Baby Memorial Hospital Kerala, India	2017
Assistant Professor Thomas Jefferson University Department of Emergency Medicine	2016-2022
Research Instructor George Washington University Department of Emergency Medicine	2015-2016

ADDITIONAL APPOINTMENTS

Associate Director Jefferson Center for Injury Research and Prevention Sidney Kimmel Medical College Thomas Jefferson University	2026-Present
Guest Instructor United States Air Force School of Aerospace Medicine Aerospace Medicine Residency Program	2025-Present

Research Experience

Principal Investigator 2024-2025
Presage Technologies Camera-Acquired Vital Signs Study
Baylor College of Medicine
Houston, TX

Site Principal Investigator 2023-2024
RCE Non-Invasive Troponin Sensor Study
Baylor College of Medicine
Houston, TX

Research Assistant 2009-2011
Department of Epidemiology
Johns Hopkins School of Public Health
Baltimore, Maryland

Research Assistant 2006-2007
Department of Chemical Engineering
Pennsylvania State University
University Park, Pennsylvania

Presentations

Invited Lecturer: Incident Command Systems and Rapid Triage Algorithms, Sand and Sea Summit Wilderness Medicine Conference; Kuwait City, Kuwait, 2024

Invited Lecturer: Remote Medical Command, Sand and Sea Summit Wilderness Medicine Conference; Kuwait City, Kuwait, 2024

Canepa C, Levin D, **Padaki A,** Antonsen E. Non-Invasive Monitoring of Heart and Respiratory Rates using a Cellphone-Based Application during a Space Analog Mission. Aerospace Medical Association Annual Scientific Meeting, Chicago, IL, 2024.

Chao K, Burman A, Titus J, Peacock W, **Padaki A**, Levin D. Non-invasive Protein Measurement by Transcutaneous Sensor. NASA Human Research Program Investigator's Workshop. Galveston, TX, 2024.

Ortiz D, Antonsen E, **Padaki A**, Hirzallah M, Kamine T, Harris N, Levin D. Needs Assessment in Space Medicine Education. Aerospace Medicine Association Annual Scientific Meeting, New Orleans, LA, 2023.

Rahm S, Phillips L, **Padaki A**, Saifi G, Aguilar Montalvan L, Wasserman T, Payne K. Incident Command: The Game. Society for Academic Emergency Medicine Annual Meeting, Online, 2021.

Phillips L, Rudner J, **Padaki A**. Mass Casualty Workshop. Wilderness Medical Society Winter Conference, Online, 2021.

Phillips L, Rudner J, **Padaki A**. Virtual Wilderness Medicine: Keeping it Wild! Wilderness Medical Society Online Seminar, 2020.

Padaki A, Redha W, Clark T, Nichols T, Jacoby L, Slivka R, Ranninger C, Lehnhardt K. Improving Responses to In-Flight Medical Emergencies through a Simulation-Based Curriculum. Aerospace Medical Association Annual Scientific Meeting, Denver, CO, 2017. *Finalist, Space Medicine Association Young Investigator Award, 2017

Ward M, Diwas K, Jenkins C, Liu D, **Padaki A**, Pines J. Emergency Departments Demonstrate Large Provider and Facility Variation in Opioid Prescriptions for Discharged Patients. Society of Academic Emergency Medicine Annual Meeting. New Orleans, LA, 2016.

Ward M, Diwas K, Jenkins C, Liu D, **Padaki A**, Pines J. The Effect of Physician Workload on Prescription of Opioids at Discharge in Five Emergency Departments. Society of Academic Emergency Medicine Annual Meeting. New Orleans, LA, 2016.

Blohm E, Shilkofski N, **Padaki A**, Saheed M, Nottidge M, Jung J. Transferability of Skills Acquired during Simulation-Based Resuscitation Training. Society of Academic Emergency Medicine Annual Meeting. Boston, MA, 2011.

Padaki A, Keshavarzi B, Borhan A, Ultman J. Contribution of the larynx to patterns of reactive gas uptake. Workshop on Multi-scale Modeling of the Respiratory System, Auckland, New Zealand, 2008.

Padaki A, Keshavarzi B, Borhan A, Ultman J. Simulations of Reactive Gas Transport through Idealized Laryngeal Geometries. Systems Biology Consortium Meeting, State College, PA, 2007.

PUBLICATIONS

Padaki A, Zarzour A, Keene K, Canepa C, Levin D, Antonsen E. Clinical Validation of Non-Contact Vital Signs in an Emergency Department Setting. *Frontiers in Medical Technology*. 7, 2026.

Rahm S, Saifi G, Payne K, Reich T, Porges I, Aguilar Montalvan L, Horrocks M, Phillips L, **Padaki A.** Incident Command System: The Game – A Board Game to Teach Mass Casualty Response. *Journal of High Threat and Austere Medicine*. 7(1): 3-7, 2025.

Canepa C, Levin D, **Padaki A**. Comparison of Camera-Acquired Vital Signs to Conventional Vital Signs in a Space-Analog Environment. *Wilderness and Environmental Medicine*. 2024.

Padaki A, Uppal P, Perza M. Paradoxical Agitation and Masseter Spasm during Propofol Procedural Sedation: A Case Report. *Clinical Practice and Cases in Emergency Medicine*. 8(4): 369, 2024.

Padaki A, Rudner J, Phillips L. Virtual Simulation of Mass Casualty Drills: Using Breakout Rooms to Simulate Physical Locations. *Frontiers in Disaster and Emergency Medicine*. 2, 2024.

Wanner G, Ader D, Caplan R, **Padaki A,** Ravert D, Drees M. Evaluation of N95 Respirator Ultraviolet Decontamination and Clinical Reuse with Quantitative Fit Testing. *Infection Control and Hospital Epidemiology*. 43(9): 1272-1274, 2022.

Padaki A, Police Reddy A, Lehnhardt K. The Utility of Hyperbaric Oxygen Therapy for Human Spaceflight- Past, Present, and Future. *Acta Astronautica*. 164: 192-196, 2019.

Ward M, Diwas K, Jenkins C, Liu D, **Padaki A**, Pines J. Emergency Department Provider and Facility Variation in Opioid Prescriptions for Discharged Patients. *American Journal of Emergency Medicine*. 37(5): 851-858, 2019.

Padaki A, Redha W, Clark T, Nichols T, Jacoby L, Slivka R, Ranninger C, Lehnhardt K. Simulation Training for In-Flight Medical Emergencies Improves Provider Knowledge and Confidence. *Aerospace Medicine and Human Performance*. 89(12):1076-1079, 2018.

Padaki A, Fitch R, Stack L, Thurman R. Horner's Syndrome after Scalene Block and Carotid Dissection. *The Journal of Emergency Medicine*. 50(5): e215-e218, 2016.

Padaki A, Ultman J, Borhan A. Ozone Uptake During Inspiratory Flow in a Model of the Larynx, Trachea, and First Bifurcation. *Chemical Engineering Science*. 64(22): 4640-4648, 2021.

Book Chapters Edited

Costinas S, **Padaki A.** (2022). Tetanus. in B Levine (Ed.) *EMRA Antibiotic Guide, 20th Edition*. Irving, TX: EMRA.

Rowles, J, **Padaki A.** (2020). HIV and Hepatitis. in B Levine (Ed.) *EMRA Antibiotic Guide, 19th Edition*. Irving, TX: EMRA.

Perry B, **Padaki A.** (2018) Adverse Reactions and Drug Interactions. in B Levine (Ed.) *EMRA Antibiotic Guide, 18th Edition* Irving, TX: EMRA.

Magazine Articles

Cassone M, Coppersmith V, Harbin T, Malka S, Mann N, **Padaki A**. Ask the Experts: How to Give a Stellar Wilderness Medicine Presentation. *Wilderness Medicine Magazine*. 38(3), 2021.

Manuscript Review

NPJ Microgravity – ad hoc reviewer 2022-present

Annals of Medicine, Emergency Medicine Section 2021-present
ad hoc reviewer

AWARDS AND HONORS

Golden Apple Award, Christiana Care Health System, Department of Emergency Medicine, Newark, Delaware, 2022

Clinician of the Year, Thomas Jefferson University, Department of Emergency Medicine, Philadelphia, Pennsylvania, 2017

OTHER ACTIVITIES

Garden J, **Padaki A.** Examining Israeli Medical Preparedness in the Context of Jefferson Medical Practices. *Phase 1*. Paper 38, 2020.

Padaki A. Clinical Pathologic Case Conference Discussion. Council of Emergency Medicine Residency Directors. San Antonio, TX, 2018.

LANGUAGES

Spanish - spoken, read, and written with high proficiency
Kannada - spoken with basic competence