

## BIOGRAPHICAL SKETCH

NAME Wendy K. Bernstein MD MBA eRA COMMONS USER NAME)credential, e.g., agency login)	POSITION TITLE Associate Professor Fellowship Director, Cardiothoracic Anesthesiology Fellowship Program Director, Simulation Program University of Maryland School of Medicine
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EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable)

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
University of Pennsylvania, Philadelphia PA	B.A.	06/85	Biochemistry
Medical College of Pennsylvania, Philadelphia PA	M.D.	05/1989	Medicine
Cornell University Medical College, Manhasset NY	Internship, Residency	06/92	Surgery
Clinical Fellow Critical Care Medicine	Research Fellowship	06/94	Critical Care Research
Johns Hopkins School of Medicine	Residency	06/96	Anesthesiology
Johns Hopkins School of Medicine	Fellowship	06/98	Cardiothoracic Anesthesiology
University Maryland University College, Baltimore MD	M.B.A.	10/2012	International Business

### A. Personal Statement

I am a board certified, fellowship trained Cardiothoracic Anesthesiologist who served as Division Chief of Cardiothoracic Anesthesiology for 5 years, Cardiothoracic Anesthesiology Fellowship Director for 16 years, and Chair of Simulation for the past 7 years. I was personally responsible for creating, developing and maintaining the Maryland Anesthesia Program for Simulation. My focus has been on anesthesia resident education by implementing a full 3 year innovative curriculum in task training as well as conducting multidisciplinary team training exercises which is supported by perioperative services for the medical center, risk management and patient safety.

### B. Positions and Honors

1997-1998	Assistant	Department of Anesthesiology and Critical Care Medicine. The Johns Hopkins University School of Medicine. Baltimore, Maryland
1998	Instructor	Department of Anesthesiology and Critical Care Medicine. The Johns Hopkins University School of Medicine. Baltimore, Maryland
1999-Present	Assistant Professor	Department of Anesthesiology, University of Maryland School of Medicine. Baltimore, Maryland
2010-present	Associate Professor	Department of Anesthesiology, University of Maryland School of Medicine. Baltimore, Maryland
2012	Finalist, Parker J. Palmer <i>Courage to Teach Award</i> , ACGME	
2012	Nomination, OSCE Development Advisory Panel, ABA	

### ***Other Experience and Professional Memberships***

2008-present	Simulation Center (MASTRI-Maryland Advanced Simulation Training Research Innovation) <ul style="list-style-type: none"> <li>• Involvement in DOD research and workflow initiatives</li> <li>• Developed business plan for operations</li> <li>• Executive member, MASTRI Advisory committee</li> <li>• Executive leadership team, MASTRI</li> <li>• Chair, Operations Committee</li> <li>• Achieved certification of ASA as accredited site</li> <li>• Assisted with ACS certification</li> </ul>
2009-present	Chair of Simulation, Education Committee, Department of Anesthesiology <ul style="list-style-type: none"> <li>• Developed curriculum and educational simulation scenario program for anesthesiology residents: difficult airway course, one lung ventilation, cardiac scenarios, anaphylaxis, malignant hyperthermia, hypotension during induction, neuroanesthesia, venous air embolism, maternal and fetal distress, airway fires, tracheal decannulation, local anesthetic toxicity, autonomic hyperreflexia, difficult airway algorithms, OB Trauma, carotid artery rupture, loss airway prone position, Stat Calls, OR fire drills, PACU hypotension, perioperative myocardial ischemia</li> <li>• Developed task training sessions in Simulation: certification of anesthesia residents in ultrasound guided central line access, arterial line, Flo Trac, PAC placement, difficult airway skill training, interosseus access, lumbar drains, regional techniques, OB Anesthesia, chest tubes, IVC management</li> <li>• Expand scope of anesthesia education outside of department</li> <li>• Developed multidisciplinary team training exercises for perioperative nursing, surgical support services and surgical subspecialties</li> </ul>
Sept 2011-2013	Consultant for the Ministry of Health in Rio de Janeiro, Brazil Assist with planning for opening multiple trauma centers and simulation center in Rio de Janeiro in preparation for hosting future World Cup Games 2014 and Summer Olympics 2016
2013-present	Achieved American Society of Anesthesiology Certification for Maryland Anesthesia Program in Simulation (MAPS)- Planning and Development of monthly recertification course for Anesthesiologists including Business plan, skills stations, team training exercises and didactics; Member, Simulation Education Network
2013-present	Director of Simulation for Department of Anesthesiology, University of Maryland School of Medicine <ul style="list-style-type: none"> <li>• Certificate for Instructor Training- Center for Medical Simulation, Boston, Massachusetts</li> <li>• Developed course evaluation and grading process for anesthesiology residents</li> <li>• Faculty development program</li> <li>• Developed relationship with Risk Management to investigate cases with high morbidity and mortality to improve outcomes</li> <li>• Development of faculty outreach programs for faculty at outside UMB programs</li> <li>• Organize Simulation component for "Bring your child to work days"</li> </ul>
2014	October Interprofessional (IPE) Development Day: Simulation Scenario and Debriefing
2015 May	Interprofessional (IPE) Development Conference- Invited Speaker
2015-present	Center for Critical Care and Trauma Education Committee (CCCTE), Shock Trauma, University of Maryland Medical Center
2015-present	Board Examiner, American Board of Anesthesiology
2015-present	Co-Chair, Continuing Medical Education Committee (Appointed by Dean)

### C. Selected Peer-reviewed PublicationsAudio/Video/CD Rom

**Bernstein WK**, Schreiber D, Murphy K, Zellhoffer C, Chang J, Raimondo D and George I. Airway fire training: Curriculum and model development and deployment for hospital operative and safety personnel. Military Medicine July 2012.

**Bernstein WK.** Video presentation International Anesthesia Research Society Annual Meeting. Boston, Massachusetts, May 2012.

**Bernstein WK.** Role of simulation to stratify learners by skill level. ACPE Leape Ahead Webinar. Meeting number 739 974 071. September 18, 2012.

Hong CM, **Bernstein WK**, and Schreiber D. Really good stuff: lessons learned through innovation in medical education; Use of simulation to educate and training physicians when clinical exposure decreases. (Under review).

**Bernstein WK**, Schreiber D, Murphy K et al. Extinguishing the Flames Using a High Fidelity Simulated Multidisciplinary Team Training Approach. (submitted).

**Bernstein WK**, Schreiber D, Murphy K et al. Tracheal Decannulation: A model for PACU multidisciplinary team training. (submitted).

## D. Research Support

8/01/04-2/28/06	15 % Effort      PI: Park, A Associate Research Faculty/Consultant Subsection: Informatics Initiative 1 Study: Operating Room of the Future. TATRC: Telemedicine and Advanced Technologies Research Command Research Study: ORF DAMD17-03-2-001 \$ 2,565,000 A multiyear grant to study the combination of advanced video and other communication equipment with information technology to enhance patient safety and operational efficiency.
3/06-3/07	PI Objective 1 Sub group 5: Improving Perioperative Communications (IPC ) Study: Operating Room of the Future. TATRC: Telemedicine and Advanced Technologies Research Command. Research Study: ORF DAMD17-03-2-001 \$50,000 To identify and evaluate methods of communication that exist in the perioperative environment and test the deployment of digital technologies to reduce cost and improve patient safety.
2009	GE/AISYS research grant. Anesthesia Machine, Simulation Efforts in Department of Anesthesiology (Principle Investigator)
2009	Edwards Scientific: Donation of Flo Trac simulation technology for assessment and use in development of cardiac scenarios
2011	Simulation Training Grant- State of Maryland Business Center China
2012-2015	5% Effort. PI: Grissom, T BAA ONRBAA12-013. Competence in combat airway management: role of semi-autonomous decision support and simulation in detection and reversal of skill loss.
2014	Simulation Education Grant. Mindray North America. Start up. (Principle Investigator). \$48,000.
2016	Simulation Education Grant. Mindray North America. Start up. (Principle Investigator). \$60,000 (submitted).
2016	Interprofessional Seed Grant. Building a Faculty Development Program for Simulation. \$10,000 (submitted)
2016	ORD, University of Maryland. Central line trainer with complications. (Patent pending)