Curriculum Vitae

Name:	Matthew Bret Weinger
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Education

1978 - 1978	B.S. in Electrical Engineering from Stanford University, CA United States
1978 - 1978	M.S. in Biological Sciences from Stanford University, CA United States
09/1978 - 06/1982	M.D. from University of California, San Diego, CA United States

Training

06/1982 - 06/1983	Internship in Internal Medicine from Cedars-Sinai Medical Center, Los Angeles, CA
07/1983 - 06/1985	Residency in Anesthesia from University of California, San Francisco
01/1986 - 01/1987	Post-Doc Research from University of California, Department of Neuropharmacology, the Research Institute of Scripps Clinic, San Diego, CA
09/1996 - 06/1997	Fellowship in Management of Perioperative Services, Department of Anesthesiology from Stanford University, Stanford, CA

Licensure and Certification

1983 - Present	Medical, California
1987 - Present	Boards, American Board of Anesthesiologists
2005 - Present	Medical, Tennessee

Academic Appointments

09/2001 - 11/2004	Director, San Diego Center for Patient Safety, Univ. of California San Diego
12/2004 - Present	Professor of Biomedical Informatics, Vanderbilt University (Nashville, Tennessee)
12/2004 - Present	Professor of Anesthesiology, Vanderbilt University (Nashville, Tennessee)
02/2005 - Present	Norman Ty Smith Chair in Patient Safety and Medical Simulation, Vanderbilt University (Nashville, Tennessee)
01/2011 - Present	Professor of Medical Education and Administration, Vanderbilt University (Nashville, Tennessee)
07/2011 - Present	Director of Research, Center for Experiential Learning and Assessment, Vanderbilt University School of Medicine (Nashville, Tennessee)

Other Work Experience

06/1974 - 09/1975	Systems Analyst and Programmer, General Electric Information Services (Rockville, Maryland)
07/1977 - 08/1978	Student Fellow in Biology, Woods Hole Oceanographic Institution w/Dr. Adrianus J. Kalmijn (Woods Hole, Massachusetts)
08/1979 - 06/1980	Systems Programmer & Technical Field Representative, Comp-U-Med Inc, Los Angeles, CA (Los Angeles, California)
07/1985 - 01/1986	Clinical Instructor, Univ. of California San Francisco (San Francisco, California)
07/1985 - 12/1985	Freelance Anesthesiologist, Mt. Zion Hospital, St. Luke's Medical Center, Pacific Coast Hospital, San Francisco, CA (San Francisco, California)
08/1986 - 08/1986	Special Research Project Associate, The Mayo Clinic (Rochester, Minnesota)
01/1987 - 12/2004	Staff Physician, VA San Diego Medical Center (La Jolla, California)
01/1987 - 06/1993	Assistant Professor, Univ. of California, San Diego (La Jolla, California)

09/1989 - 09/2002	Member, Neurosciences Group, Univ. of California San Diego (San Diego, California)
04/1990 - 05/1995	Adjunct Assistant Member, The Scripps Research Institute, La Jolla, CA (La Jolla, California)
07/1993 - 06/1998	Associate Professor, Univ. of California, San Diego (La Jolla, California)
05/1995 - 12/2004	Adjunct Associate Member, The Scripps Research Institute, La Jolla, CA (La Jolla, California)
09/1996 - 06/1997	Visiting Associate Professor, Stanford University (Stanford, California)
07/1998 - 12/2004	Professor, Univ. of California San Diego (La Jolla, California)
01/2001 - 12/2004	Director, Univ. of California San Diego (San Diego, California)
01/2005 - Present	Staff Physician, Middle Tennessee VA Healthcare System (Nashville, Tennessee)
01/2005 - 11/2010	Co-Director, Center for Improving Patient Safety (CIPS), Vanderbilt University and the Middle Tennessee VA Healthcare System (Nashville, Tennessee)
01/2005 - 06/2011	Director, Simulation Technologies Program, Center for Experiential Learning and Assessment, Vanderbilt University (Nashville, Tennessee)
01/2005 - Present	Professor, Anesthesiology, Biomedical Informatics, and Medical Education, Vanderbilt University (Nashville, Tennessee)
01/2005 - 11/2010	Director, Center for Perioperative Research in Quality (CPRQ), Vanderbilt University Medical Center (Nashville, Tennessee)
06/2008 - Present	Vice Chair for Academic Affairs, Anesthesiology, Vanderbilt University School of Medicine (Nashville, Tennessee)
11/2010 - Present	Director, Center for Research and Innovation in Systems Safety, Vanderbilt University Medical Center (Nashville, Tennessee)

Professional Organizations

1989	Association for the Advancement of Medical Instrumentation, Human Engineering Committee, Member
1997 - 2010	Association for the Advancement of Medical Instrumentation, Human Engineering Committee, Co-chairman
2001 - 2015	Anesthesia Patient Safety Foundation, Education Committee
2003	Anesthesia Patient Safety Foundation, Research Committee
2005	Anesthesia Patient Safety Foundation, Executive Board of Directors
2005 - 2013	Food and Drug Administration, Center for Devices and Radiological Health, Consultant, Advisory Panel on Gastroenterology and Urological Devices
2006	American Society of Anesthesiologists, Member, Committee on Simulation Education
2006 - 2010	Society for Simulation in Healthcare, Member, Research Committee
2008	Anesthesia Patient Safety Foundation, Secretary
2008	American Board of Anesthesiology, Senior Associate Examiner
2009 - 2013	Agency for Healthcare Research and Quality, Technical Expert Panel on Computer-based Clinical Decision Support
2011	Association for the Advancement of Medical Instrumentation, Member, Board of Directors
2012	American Society of Anesthesiologists, Simulation Education Editorial Board
2014	Anesthesia Quality Institute, Board of Directors
2014	Association for the Advancement of Medical Instrumentation, Vice Chair for Research, Board of Directors
2014 - 2015	iAC LLC, Corporate Scientific Advisory Board

Professional Activities

Extramural

N/A	Ad-hoc Reviewer for Anesthesia and Analgesia
N/A	Ad-hoc Reviewer for Anesthesiology
N/A	Ad-hoc Reviewer for British Medical Journal (BMJ)
N/A	Ad-hoc Reviewer for Journal of Biomedical Informatics
N/A	Ad-hoc Reviewer for Psychopharmacology
N/A	Ad-hoc Reviewer for Journal of Pharmacology and Experimental Therapeutics
N/A	Ad-hoc Reviewer for Brain Research

N/A	Ad-hoc Reviewer for Journal of Clinical Investigation
N/A	Ad-hoc Reviewer for American Journal of Obstetrics and Gynecology
N/A	Ad-hoc Reviewer for Pharmacology, Biochemistry, and Behavior
N/A	Ad-hoc Reviewer for Journal of Clinical Monitoring (originally, Journal of Clinical Monitoring and Computing)
N/A	Ad-hoc Reviewer for Neuropeptides
N/A	Ad-hoc Reviewer for Quality and Safety in Healthcare
N/A	Ad-hoc Reviewer for Human Factors
N/A	Ad-hoc Reviewer for Science
N/A	Ad-hoc Reviewer for Journal of the American Medical Association (JAMA)
N/A	Ad-hoc Reviewer for Health Services Research (HSR)
N/A	Ad-hoc Reviewer for Journal of Clinical Anesthesia
1988 - 1990	UCSD, Department of Anesthesiology: Resident Education Committee, Member
1991 - 1996	VA San Diego: Impaired Physician Advisory Committee, Member
1992 - 1997	VA San Diego: Drug Utilization Evaluation Committee (1991- 1996), Chairman
1994 - 2004	UCSD, Department of Anesthesiology: Capital Equipment and Computer Committee, Chairman
1994 - 1996	UCSD, Department of Anesthesiology: Visiting Professor Program, Director
1994 - 1998	VA San Diego: Pharmacy and Therapeutics Committee (1990-1998), Vice Chairman
1996 - 2002	Pharmacology, Biochemistry, and Behavior
1998 - 2001	VA San Diego: Research and Development Committee, Member
2001 - 2001	VA San Diego: Root cause analysis task force, Member
2002 - 2004	UCSD, Department of Anesthesiology: Resident Oral Board Examination Process, Director
2002 - 2003	VA San Diego: Budget Subcommittee of the Research and Development Committee (2001-2003), Chair
2004 - 2009	Associate Editor for AHRQ's Web M&M
2005 - Present	Vanderbilt, Department of Anesthesiology: Education Committee, Member
2005 - Present	VA Nashville: Research and Development Committee, Adjunct member
2005 - Present	Editorial Board for Human Factors
2006 - 2008	Vanderbilt, Department of Anesthesiology: Research Executive Committee, Vice Chairman
2006 - 2008	Vanderbilt, Department of Anesthesiology: Finance Committee, Vice Chairman
2007 - 2008	Vanderbilt, Department of Anesthesiology: Faculty Appointments and Promotions Committee (2005-present), Co-Chairman
2008 - Present	Vanderbilt, Department of Anesthesiology: Faculty Affairs, Reviewed applications, Vice Chairman
2008 - Present	Vanderbilt, Department of Anesthesiology: Faculty Appointments and Promotions Committee (2005-present), Chairman
2008 - Present	Vanderbilt, Department of Anesthesiology: Executive Committee, Member
2008 - Present	Editorial Board for Simulation in Healthcare
2010 - Present	Associate Editor for Human Factors, Health and Healthcare Systems

Teaching Activities

N/A	â€œPatient Safety â€" A Systems Problemâ€ â€" Annual lecture and seminar to second-year medical students in Fall quarter core course, Healthcare Delivery Systems., Lecturer, UC San Diego
N/A	â€œIntroduction to Patient Safety and Medication Errorâ€ â€" Lecture and seminar to first-year pharmacy students in Spring quarter core course, Pharmacy Informatics., Lecturer, UC San Diego
N/A	â€œPersonal and Professional Decision Makingâ€ â€" Full quarter 40-hour elective course for medical, biomedical graduate, and healthcare leadership masters students., Lecturer, UC San Diego
N/A	â€œMedical Use of Opiate Drugsâ€ â€" Lecture to Psychology undergraduate majors taking the Psychology 179 upper division course., Lecturer, UC San Diego
N/A	â€œDealing with Medical Errorâ€ â€" Lecture and panel discussion for fourth-year medical students in Spring quarter core course, Principles to Practice., Lecturer, UC San Diego

2005 - Present	Organize and participate in quarterly simulation c ourses for 3rd year medical students during Critical Care Skills Week with the Surgery Core Clerkship, Instructor, Vanderbilt University Medical Center
2005 - Present	Intermittent seminars and lectures for anesthesia residents, medical students, nursing students and others, Presenter, Vanderbilt University Medical Center
2005 - Present	Frequent simulation course instructor for anesthesia residents, Trainer, Vanderbilt University Medical School
2005 - Present	Annual lecturer on human factors engineering to graduate medical students in Biomedical Informatics, Lecturer, Vanderbilt University Medical Center
2005 - Present	Biannual seminar in human factors engineering for Dept of Biomedical Information, Lecturer and presenter, Vanderbilt University Medical Center
2007 - 2013	Foundations Teamwork Day for New Medical Students, Creator & Course Director, Vanderbilt University Medical School

Research Supervision / Mentorship

N/A	Anne Miller, Ph.D., R.N. (Post-doc Fellow, General Mentorship)
N/A	Laurie Novak, Ph.D. (Post-doc Fellow, Research)
N/A	Alex Arnold (Undergraduate, Research)
N/A	Gina Whitney, M.D. (Faculty, Research)
N/A	Irving Ye (Medical Student, Research)
N/A	David Gonzales, M.D. Current Position: Simulation Consultant, San Diego, CA. (Post-doc Fellow, General Mentorship)
N/A	Allison Vredenburgh, Ph.D. Current Position: Vredenburgh and Associates (human factors consulting practice), Carlsbad, CA. (Post-doc Fellow, General Mentorship)
N/A	Gery Schulteis, Ph.D. University of California San Diego, Director of Research, VA San Diego Medical Center, Current Position: Professor of Neurosciences. (Post-doc Fellow, General Mentorship)
N/A	Steven Negus, Ph.D. Harvard University, Boston, MA, Current Position: Professor of Pharmacology. (Post-doc Fellow, General Mentorship)
N/A	Larry Dallen, M.D. Victoria General Hospital, Dept. of Anesthesiology, Victoria, BC, Canada, Current Position: Staff Anesthesiologist. (Post-doc Fellow, General Mentorship)
N/A	Scott Levin, Ph.D. Current Position: PhD Committee, Biomedical Engineering, Assistant Professor of Emergency Medicine, The Johns Hopkins University. (Graduate Student, General Mentorship)
N/A	Cynthia Leung, Ph.D. Temple University School of Medicine, Philadelphia, PA. (Post-doc Fellow, General Mentorship)
N/A	Dong-Yi Chen, Ph.D. Current Position: Industry. (Post-doc Fellow, General Mentorship)
N/A	Caroline Harriott, M.S. Current Position: PhD Committee, Electrical Engineering and Computer Science, Current PhD Student. (Graduate Student, General Mentorship)
N/A	Mark Rasmussen, M.D. US Navy Medical Corps, Camp Pendleton, CA, Current Position: Staff Anesthesiologist. (Post-doc Fellow, General Mentorship)
N/A	Nelda Ordonez, M.D. Current Position: Industry consultant, California. (Post-doc Fellow, General Mentorship)
N/A	Kim Unertl, Ph.D. Vanderbilt University, Current Position: Assistant Professor of Biomedical Informatics. (Faculty, Research)
2008 - Present	Shilo Anders, Ph.D. Vanderbilt University, Current Position: Assistant Professor. (Faculty, Research)
2011 - Present	Richard Holden, Ph.D. Vanderbilt University, Current Position: Assistant Professor of Internal Medicine and Public Health. (Faculty, Research)
06/2013 - 10/2013	Christiane Schubert, Ph.D. Loma Linda University, Current Position: Assistant Professor of Medical Education,. (Post-doc Fellow, General Mentorship)
01/2014 - Present	Tony Threatt, Ph.D. Vanderbilt Medical Center. (Post-doc Fellow, General Mentorship)
2015 - Present	Jie Xu, Ph.D. (Post-doc Fellow, General Mentorship)

Grants and Funding

Grant number unavailable	1986 - 1987

Janssen Pharmaceutica :::
Neural mechanisms of opiate-induced rigidity
Role: Principal Investigator
Total Cost: $40,000.00

Grant number unavailable 1987 - 1989
UCSD Academic Senate :::
Pharmacokinetics of intracranial injections of opiate antagon- ists
Role: Principal Investigator
Total Cost: $7,450.00

Grant number unavailable 1988 - 1989
Veterans Administration Regional Advisory Group :::
The neurochemical basis of opiate-induced muscle rigidity
Role: Principal Investigator
Total Cost: $43,500.00

Grant number unavailable 1988 - 1990
American Society of Anesthesiologists/Parker B. Francis Foundation :::
Elucidation of the opiate receptor subtypes mediating opiate-induced muscle rigidity
Role: Principal Investigator
Total Cost: $62,000.00

Grant number unavailable 1989 - 1990
DuPont Pharmaceuticals :::
Esmolol infusions in patients with coronary artery disease undergoing major abdominal surgery
Role: Principal Investigator
Total Cost: $6,500.00

Grant number unavailable 1989 - 1992
Veterans Administration Merit Review :::
Neurochemical substrates of opiate-induced muscle rigidity
Role: Principal Investigator
Total Cost: $115,900.00

Grant number unavailable 1990 - 1991
Farmos Group :::
Effects of alpha-2 agonists and antagonists on opiate-induced muscle rigidity
Role: Principal Investigator
Total Cost: $10,000.00

Grant number unavailable 1990 - 1992
Ohmeda Corporation :::
Evaluation of modes of visual display: Effects on anesthetic vigilance
Role: Principal Investigator
Total Cost: $21,000.00

Grant number unavailable 1991 - 1991
Anesthesia Patient Safety Foundation :::
Effects of modes of visual display on anesthetic vigilance
Role: Principal Investigator
Total Cost: $3,500.00

Grant number unavailable 1991 - 1992
UCSD Academic Senate :::
Task and workload analysis of anesthesiologists: Effects of automated recordkeeping
Role: Principal Investigator

Total Cost: $5,700.00

Grant number unavailable 1991 - 1993
Diatek Corporation :::
Clinical testing of an automated anesthesia recordkeeping network
Role: Principal Investigator
Total Cost: $45,000.00

Grant number unavailable 1992 - 1993
Roy E. Crummer Foundation :::
Anesthesia ergonomics
Role: Principal Investigator
Total Cost: $5,000.00

Grant number unavailable 1992 - 1995
::: National Institute of Drug Abuse
Opioid receptor pharmacology in opiate anesthesia
Role: Principal Investigator
Total Cost: $276,000.00

Grant number unavailable 1994 - 1995
::: Glaxo Research Institute
Multicenter randomized double-blind placebo-controlled study of ondansetron vs. droperidol prophylaxis in patients with a prior history of post-opertive nausea or vomiting undergoing ambulatory surgery
Role: Principal Investigator
Total Cost: $64,500.00

Grant number unavailable 1994 - 1995
::: Glaxo Research Institute
Double-blind evaluation of remifentanil versus morphine sulfate for post-operative analgesia after total intravenous anesthesia
Role: Principal Investigator
Total Cost: $4,000.00

Grant number unavailable 1995 - 1995
Houghton Pharmaceuticals :::
The effects of HP228 on ventilation and analgesia when administered alone or in combination with morpine in human volunteers
Role: Co-Principal Investigator
Total Cost: $14,800.00

Grant number unavailable 1995 - 1996
Organon Pharmaceutical :::
Cost-effectiveness analysis of perioperative management of major spine surgery
Role: Principal Investigator
Total Cost: $10,000.00

Grant number unavailable 1995 - 1996
Joseph Drown Foundation :::
Study of the mechanisms of meperidine-induced attenuation of post-anesthetic shivering in the rat.
Role: Principal Investigator
Total Cost: $3,483.00

Grant number unavailable 1997 - 1997
Department of Veterans Affairs :::
In vivo pharmacology of delta opioid receptors

Role: Principal Investigator
Total Cost: $30,400.00

Grant number unavailable 1997 - 1998
Anesthesia Patient Safety Foundation :::
Scientific Measurement of Anesthesiologist Performance
Role: Principal Investigator
Total Cost: $49,100.00

Grant number unavailable 1997 - 2000
National Institute on Drug Abuse :::
CNS delta opioid receptors in pain and drug abuse
Role: Co-Investigator
Total Cost: $346,214.00

Grant number unavailable 1998 - 2000
National Institute on Drug Abuse :::
Modulation of opiate tolerance by chronic pain
Role: Co-Investigator
Total Cost: $49,176.00

Grant number unavailable 1999 - 2001
National Patient Safety Foundation :::
Measurement of Clinical Expertise: Application to clinical training and patient safety
Role: Principal Investigator
Total Cost: $99,953.00

Grant number unavailable 1999 - 2004
National Institute of Heart, Lung and Blood :::
Integration and Visualization of Physiologic Data
Role: Co-Investigator
Total Cost: $90,396.00

Grant number unavailable 2000 - 2001
UCSD Academic Senate :::
Development and Evaluation of an Instrumented Laryngoscope
Role: Principal Investigator
Total Cost: $9,023.00

Grant number unavailable 2001 - 2004
Department of Veterans Affairs, Health Services Research and Development Service :::
Unexpected Clinical Events: Impact on Patient Safety
Role: Principal Investigator
Total Cost: $738,976.00

Grant number unavailable 2001 - 2005
Agency for Healthcare Research and Quality :::
Unexpected clinical events: Impact on Patient Safety
Role: Principal Investigator
Total Cost: $240,475.00

Grant number unavailable Matthew Weinger, MD (PI) 09/2001 - 08/2005
Agency for Healthcare Research and Quality :::
SDCERPS: Standardized encounters to study patient safety
Role: Principal Investigator
Total Cost: $442,865.00

Grant number unavailable 2002 - 2002
Anesthesia Patient Safety Foundation :::
Mechanics of Laryngoscopy
Role: Co-Investigator
Total Cost: $64,774.00

Grant number unavailable Dresselhaus (PI) 09/2003 - 09/2005
Agency for Healthcare Research and Quality :::
Real-time assessment of risk factors for medication errors
Role: Mentor
Total Cost: $142,129.00

Grant number unavailable 07/2004 - 03/2005
United States Food and Drug Administration, Center for Devices and Radiological Health :::
Epidemiology of Infusion Pump Use and Use Error
Role: Principal Investigator
Total Cost: $63,328.00

Grant number unavailable Speroff (PI) 07/2005 - 06/2007
Agency for Healthcare Research :::
Safe Critical Care: Testing Improvement Strategies
Role: Co-Investigator
Total Cost: $387,362.00

Grant number unavailable Powers (PI) 07/2006 - 06/2010
Donald W. Reynolds Foundation :::
Vanderbilt-Reynolds Geriatrics Education Center
Role: Co-Investigator
Total Cost: $1,099,837.00

Grant number unavailable Matthew Weinger, MD (PI) 09/2006 - 09/2008
Agency for Healthcare Research and Quality :::
STRAIT: Simulation Training for Rapid Assessment and Improved Teamwork
Role: Principal Investigator
Total Cost: $384,042.00

Grant number unavailable Slagle (PI) 01/2007 - 06/2009
Anesthesia Patient Safety Foundation :::
Prevalence and nature of intraoperative distractions measurement of their impact on anesthesia care tasks, vigilance, workload and non-routine events
Role: Co-Investigator
Total Cost: $127,075.00

SBIR (Phase 2) Agutter (PI) 09/2007 - 09/2009
::: National Institute of Heart, Lung & Blood (NIHLB)
Commercialization of a graphical display for critical care environments
Role: Principal Investigator
Total Cost: $107,000.00

Grant number unavailable 2008 - 2011
National Library of Medicine, National Institutes of Health (Rosenbloom, PI) :::
A Framework based clinical documentation evaluation method
Role: Co-Investigator
Total Cost: $916,362.00

Grant number unavailable 01/2008 - 12/2011

Veterans Administration Health Services Research and Development :::
Operating Room Workload and Quality of Care
Role: Principal Investigator
Total Cost: $755,900.00

Grant number unavailable Rosenbloom (PI) 09/2008 - 09/2011
National Library of Medicine (NLM) R01
A Framework based clinical documentation evaluation method.
Role: Co-Investigator
Total Cost: $916,362.00

Grant number unavailable France (PI) 04/2009 - 03/2011
National Heart Lung and Blood Institute (NHLBI) R21
Computer simulation of Acute Coronary Syndrome Care in the Emergency Department
Role: Co-Investigator
Total Cost: $407,742.00

Grant number unavailable Novak (PI) 10/2009 - 09/2012
National Library of Medicine (NLM)
Patient Safety Through Implementation Science: Clinical Work Culture & IT Design
Total Cost: $820,250.00

Grant number unavailable K. Fletcher (PI) 01/2010 - 01/2011
Veterans Administration Health Services Research and Development (VA HSRD)
Incorporating Patient Complexity into Physician Workload Assessment
Role: Co-Investigator
Total Cost: $100,000.00

R18 HS020415-01 Matthew Weinger, MD (PI) 04/2011 - 03/2015
Agency for Healthcare Research and Quality (AHRQ)
Creating simulation-based performance assessment tools for practicing physicians
Role: Principal Investigator
Total Cost: $858,377.00

SB1341-11-CN-0011 Michael Wiklund (PI) 07/2011 - 09/2015
National Institute of Standards and Technology (NIST)
Develop usability guidelines and evaluation framework for electronic health records.
Role: Co-Principal Investigator
Total Cost: $168,064.00

Grant number unavailable Laposata (PI) 10/2011 - 09/2013
Centers for Disease Control (CDC)
Pharmacogenomic Resource for Enhanced Decisions in Clopidogrel Treatment (PREDICT)
Role: Co-Investigator
Total Cost: $643,196.00

Grant number unavailable Ehrenfeld (PI) 01/2012 - 12/2012
Anesthesia Patient Safety Foundation (APSF)
Enhancing perioperative safety through the determination of intraoperative predictors of post-operative deterioration.
Role: Mentor
Total Cost: $126,953.00

Grant number unavailable Holden (PI) 07/2012 - 12/2013
Vanderbilt Institute for Clinical and Translational Research - NIH CTSA
Design and evaluation of health information technology to support distributed cognitive work in chronic care.

Role: Mentor
Total Cost: $182,000.00

Grant number unavailable Arna Banerjee, MD (PI) 07/2012 - 06/2015
Foundation for Anesthesiology Education and Research (FAER)
Factors contributing to global subjective clinical assessments.
Role: Mentor
Total Cost: $99,985.00

Grant number unavailable Matthew Weinger, MD (PI) 08/2012 - 12/2015
Patient Centered Outcomes Research Institute (PCORI)
Patient-Centered Non-Routine Events to identify risks to best patient outcomes.
Role: Principal Investigator
Total Cost: $750,681.00

Grant number unavailable Lorinc (PI) 07/2013 - 06/2016
Foundation for Anesthesiology Education and Research
â€œHandover tool participatory design and educational training intervention to improve perioperative neonatal safety.
Role: Mentor
Total Cost: $99,990.00

R01 HS021496 08/2013 - 07/2017
Agency for Healthcare Research and Quality (AHRQ)
â€œPersonal health information needs and practices for maternal fetal careâ€
Role: Mentor
Total Cost: $1,062,220.00

Grant number unavailable 12/2013 - 11/2014
National Institute of Aging (NIA)
A human factors approach to support older chronically ill patientsâ€™ home care
Role: Mentor
Total Cost: $359,176.00

Grant number unavailable Rothman (PI) 01/2014 - 06/2016
Patient Centered Outcome Research Institute
Mid-south clinical data research network
Role: Co-Investigator
Total Cost: $1,500,000.00

I01 HX001284 01/2014 - 06/2018
Veterans Administration Health Services Research and Development (VA HSRD)
Automated surveillance and intervention among patients with liver cirrhosis
Role: Co-Investigator
Total Cost: $1,099,951.00

Grant number unavailable 10/2014 - 09/2017
Department of Energy (DOE)
Meta-level design guidance and operator performance measures for hybrid control rooms.
Role: Principal Investigator
Total Cost: $558,594.00

Grant number unavailable 07/2016 - 06/2020
National Institute of Child Health and Human Development
The impact of non-routine events on neonatal safety in the perioperative environment.
Role: Co-Investigator
Total Cost: $1,542,277.00

Honors / Awards

1978	Kappa Sigma International Scholarship-Leadership Award
1978	Award winner, IEEE-AEMB Student Paper Competition
1988	Parker B. Francis Foundation/American Society of Anesthesiologists Young Investigator Award
1992	Association of University Anesthetists (Elected).
04/1997	On-the-Spot Award, Food and Drug Administration, USPHS
1998	James S. Todd Memorial Award for Patient Safety Research, National Patient Safety Foundation
03/2003	Â¿Best of MeetingÂ¿ Award for scientific presentation, International Anesthesia Research Society 76th Congress
2004	One of the top 100 notable people in the medical device industry, Medical Device and Diagnostic Industry magazine
03/2004	Â¿Best of MeetingÂ¿ Award for scientific presentation, International Anesthesia Research Society 77th Congress
02/2006	Norman Ty Smith Chair in Medical Simulation and Patient Safety, Vanderbilt University
2010	Technical Committee Award, Association for the Advancement of Medical Instrumentation, for role as co-chair of the committee that published the American national standard, ANSI/AAMI HE75:2009
2010	Charles B. Pittinger Award for Excellence in Clinical/Translational Research, Department of Anesthesiology, Vanderbilt University
2012	Elected a Fellow of the Human Factors and Ergonomics Society, Human Factors and Ergonomics Society
05/2014	Laufman-Greatbach Award, AAMI Foundation, Honors an individual or group that has made a unique and significant contribution to the advancement of medical instrumentation, service, patient care, or patient safety.

Publications

Peer Reviewed Publications

Abstracts

1. **Weinger MB**, Brimm JE, Brienzo RK, Utley JR, Peters RM. End-tidal carbon dioxide as a measure of arterial carbon dioxide during Intermittent Mandatory Ventilation. Chest 1981 Sep;80(3):380.
2. Wood DL, **Weinger MB**, Furst SR. Antagonism of the respiratory effects of mu and delta opioid agonists. Anesthesiology 1984 Sep;81(3A):A1408.
3. **Weinger MB**, Cline EJ, Smith NT, Koob GF. Ketanserin pretreatment prevents alfentanil-induced muscular rigidity in the rat. Anesthesiology 1986 Sep;65(3A):A344.
4. **Weinger MB**, Cline EJ, Blasco TA, Smith NT, Koob GF. Localization of brain sites which may play a role in alfentanil-induced muscle rigidity in the rat. Anesthesiology 1987 Sep;67(3):A384.
5. Schreiber JF, **Weinger MB**, Koob GF. The effects of RO 15-1413 and FG 7142 on barbiturate and halothane anesthesia. Clinical Pharmacology and Therapeutics 1988; 43(2):167.
6. Weigner MB, Schreiber JF, Koob GF. RO 15-4513 antagonizes barbiturate but not halothane anesthesia. Anesthesia & Analgesia 1988; 67(2S):S254.
7. **Weinger MB**, Koob GF. Further elucidation of brain sites which mediate alfentanil-induced muscle rigidity in the rat. Anesthesiology 1988 Sep;69(3A):A610.
8. Sanford TJ, **Weinger MB**, Koob GF. The effect of midazolam pretreatment on alfentanil-induced muscle rigidity. Anesthesiology 1988 Sep;69(3A):A556.
9. **Weinger MB**, Furst SR. The selective alpha-2 agonist, dexmedetomidine, does not potentiate alfentanil-induced respiratory depression in the rat. Anesthesiology 1989 Sep;71(3A):A1094.
10. Frust SR, **Weinger MB**. Dexmedetomidine, a selective alpha-2 agonist, does not potentiate alfentanil-induced cardiovascular depression in the rat. Anesthesiology 1989 Sep;71(3A):A580.
11. Bronson B, **Weinger MB**. Opiate-induced muscle rigidity is mediated by mu, and not delta or kappa receptors, in the rat. Anesthesiology 1989 Sep;71(3A):A600.
12. **Weinger MB**, Furst SR. The effects on muscle tone of selective alpha-2 adrenergic agonists and antagonists during high-dose alfentanil anesthesia in the rat. Anesthesia & Analgesia 1990 Feb;70(2S):S425.

13. Partridge BL, **Weinger MB**. Comparison of pretreatments to prevent the cardiovascular response to ECT. Anesthesia & Analgesia 1990 Feb;70(2S):S425.
14. Dallen L, Nguyen L, Zornow M, **Weinger MB**, Gaba D. Task analysis/ workload of anesthetists performing general anesthesia. Anesthesiology 1990 Sep;73(3A):A498.
15. **Weinger MB**, Bronson JB, Furst SR, Pasternak G. Naloxonazine blocks alfentanil-induced analgesia but not muscle rigidity in the rat. Anesthesiology 1990 Sep;73(3A):A331.
16. **Weinger MB**, Motis V, Negus SS. Alfentanil-induced muscle rigidity is antagonized by central administration of kappa agonists in the rat. Anesthesia & Analgesia 1991 Feb;72(2S):S319.
17. Price RL, Fontenot RF, **Weinger MB**, Reisner LS, Henry A. Double-blind patient evaluation of patient-controlled epidural analgesia (PCEA) during labor. Anesthesiology 1991 Sep;75(3A):A836.
18. Herndon OW, **Weinger MB**, Paulus MP, Zornow MH, Gaba D. Analysis of the task of administering anesthesia: additional objective measures. Anesthesiology 1991 Sep;75(3A):A487.
19. Gaba DM, Herndon O, Zornow M, Winger M, Dallen L. Task analysis, vigilance, and workload in novice residents. Anesthesiology 1991 Sep;75(3A).
20. Henry AF, **Weinger MB**, Partridge BL. The effects of dexmedetomidine on vecuronium-induced twitch depression - a rat model. Anesthesiology 1991 Sep;75(3A):A794.
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14. **Weinger MB**. Human factors in anesthesiology. Handbook of Human Factors and Ergonomics in Health Care and Patient Safety. Boca Raton, Florida, United States: CRC Press/Taylor and Francis; 2011; 2nd Edition.
15. Banerjee A, Easdown LJ, **Weinger MB**. Simulation for assessing human responses to critical events. The Oxford Handbook of Congnitive Engineering. Editors: Leee JD, Kirlik A. OxfordUnited Kingdom: Oxford University Press; 2011.
16. Carayon P, Karsh BT, Alvarado CJ, **Weinger MB**, Wiklund M. Environment of use. Handbook of Human Factors in Medical Decice Design. Editors: Weinger MB, Wiklund M, Gardner-Bonneau D. Boca Raton, Florida, United States: CRC Press; 2011; 63-96.
17. **Weinger MB**, Wiklund M. General principles. Handbook of Human Factors in Medical Decice Design. Editors: Weinger MB, Wiklund M, Gardner-Bonneau D. Boca Raton, Florida, United States: CRC Press; 2011; 1-22.
18. Anders, S., France, D., and **Weinger, M**. B. Anesthesia and OR teamwork.. Improving Patient Safety Through Teamwork and Team Training.. Editors: Salas, E. and Frush, K. New York CityUnited States: Oxford University Press; 2012; 119-128. ISBN: 0195399099.
19. Banerjee, A., Easdown, L. J., and **Weinger, M**. B.:. Simulation for assessing human responses to critical events.. The Oxford Handbook of Cognitive Engineering. Editors: Lee, J. D. and Kirlik, A. OxfordUnited Kingdom: Oxford University Press; 2013; 336-351. ISBN: 0199757186.
20. Loeb, R., **Weinger, M**. B., and Berry, J.:. Ergonomics of the anesthesia workspace.. Anesthesia Equipment: Principles and Applications. Editors: Ehrenwerth, J., Eisenkraft, J. B., and Berry, J.,. Malvern, Pennsylvania, United States: Mosby Year Book,; 2013; 485-509. ISBN: 0323112374.
21. **Weinger, M**. B. and Berry, J. Vigilance, alarms, and integrated monitoring systems.. Anesthesia Equipment: Principles and Applications. Editors: Ehrenwerth, J., Eisenkraft, J. B., and Berry,. Malvern, PA,United States: Mosby Year Book,; 2013; 448-484. ISBN: 0323112374.

Conference Proceedings

1. **Weinger MB**, Vora S, Herndon CN, Howard SK, Smith BE, Mazzei WJ, Rosekind MR, Gaba Dm. Evaluation of the effects of fatigue and sleepiness on clinical performance in on-call anesthesia residents during actual night time cases and in simulated cases. Proceedings of Enhancing Patient Safety and Reducing Errors in Health Care. National Patient Safety Foundation. 1999; Chicago; 306-310.
2. **Weinger MB**. Auditory warnings in the medical work domain: An overview of the critical issues. Proceedings of the IEA 2000/HFES 2000 Congress. 2000; 44:1211-1215.

3. Vrendenburgh AG, **Weinger MB**, Williams KJ, Kalsher MJ, Macario A. Developing a technique to measure anesthesiologistsâ€™ real-time workload. Proceedings of the IEA 2000/HFES 2000 Congress. 2000; 44:4241-4244.

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5. **Weinger MB**, Slagle J. Human factors research in anesthesia patient safety: Techniques to elucidate factors affecting clinical task performance and decision-making. Proceedings of the Annual Symposium of the American Medical Informatics Association. 2001; 756-760.

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7. Albert RW, Drews FA, Syroid ND, Strayer DL, Agutter J, Westenskow DR, Loeb RG, **Weinger MB**. Facilitation of anesthetic administration during simulated surgeries with a drug display. Proceedings of the HFES 2001 Congress. 2001; 45:1264-1268.

8. Vrendenburgh A, **Weinger MB**. A critical analysis of how the relationship between the pharmaceutical companies, the FDA, clinicians and patients impacts patient safety. Proceedings of the Human Factors and Ergonomics Society. 2004; 48:2004-2044.

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10. Deshpande J, Allen L, Deppen S, France D, Newton M, Parekh A, So S, Throop P, Walczyk B. The Quality Rounds Initiative. American College of Healthcare Executives. 2004.

11. Morris J, Grogan EL, Norris PR, France DJ, Stiles R, Harris P, Ozdas A. An Early Predictor of Death in Trauma Patients (Abstract). American Surgical Association 124th Annual Meeting. 2004; San Francisco, CA.

12. France DJ, Cartwright J, Whitlock J. Chemotherapy Incident Reporting and Improvement System. NACHRI Annual Conference. 2004; San Diego, CA.

13. Vrendenburgh A, **Weinger MB**. Communication of drug hazard information: A critical analysis of how the relationship between the pharmaceutical companies, the FDA, clinicians and patients impacts patient safety. Proceedings of the Human Factors and Ergonomics Society. 2004; 48:2004-2044.

14. Connor O, Cooke N, **Weinger MB**, Slagle J. Using psychological scaling techniques to assess clinical expertise in anesthesiology. Proceedings of the Human Factors and Ergonomics Society. 2004; 48:1746-1750.

15. Nemeth CP, Nunnally M, Cook RI, Crowley J, **Weinger M**, Woods DD. Brave new world: Medical devices, clinical information systems, networks, and patient safety. Proceedings of the Human Factors and Ergonomics Society. 2005; 49.

16. Schultz K, Brown R, Douglas S, Frederick B, Lakhani M, Scruggs J, Slagle J, Slater B, **Weinger MB**, Wood KE, Carayon P. Development of a job task analysis tool for assessing the work of physicians in the intensive care unit. Proceedings of the Human Factors and Ergonomics Society. 2006; 50:1469-1473.

17. Unertl, KM, **Weinger M**N, Johnson KB. Applying direct observation to model workflow and assess adoption. American Medical Informatics Association Annual Symposium Proceedings. 2006; 794-798.

18. Slagle JM, Kunta A, France D, Speroff T, Madboul A, **Weinger MB**. Simulation Training for Rapid Assessment and Improved Teamwork: Lessons learned from a project evaluating clinical handoffs. Proceedings of the Human Factors and Ergonomics Society. 2007; 51:668-671.

19. Rayo M, Smith P, **Weinger MB**, Slagle JS. Assessing Medication Safety Technology in the Intensive Care Unit. Proceedings of the Human Factors and Ergonomics Society. 2007; 51:692-696.

20. Unterl KM, **Weinger MB**, Slagle JS. Variation in use of informatics tools among providers in a diabetes clinic. American Medical Informatics Association Annual Symposium Proceedings. 2007 Oct;756-760.

21. Miller A, Novak L, **Weinger MB**, Buerhaus P. Processes and support tools for the interhospital neonatal patient transfer: A preliminary study. Proceedings of the Human Factors and Ergonomics Society. 2008; 52:865-869.

22. Miller A, Miller R, Hutchinson S, **Weinger MB**, Beurhaus P. Clinical communication in a trauma intensive care unit (ICU): A case study. Proceedings of the Human Factors and Ergonomics Society. 2008; 52:835-839.

23. Slagle, J. M., Anders, S., Calderwood, C., **Weinger, M**. B. Significant physiological disturbances in cases with and without non-routine events: An analysis of videotaped anesthetics.. Proceedings of the Human Factors and Ergonomics Society. 2009; 53:674-678.

24. **Weinger MB**, Slagle J, Kuntz A, Banerjee A, Schildcrout J, Mercaldo N, France DJ, Speroff T, Bills J, Wallston K, PACU Handover Improvement Team. Improving Actual Handover Behavior With a Simulation-Based Training Intervention. Human Factors and Ergonomics Society 54th Annual Meeting. 2010; 54:957-961.

25. Anders S, Porterfield E, Slagle M, **Weinger MB**. Under the radar: Technology related events during anesthesia care. American Medical Informatics Association Annual Symposium Proceedings. 2010 Nov.

Videos

1. **Weinger MB**, Blike GT. Infant paralyzed for intubation before airway materials ready. 2003 Sep.

Books

1. **Weinger MB**. Human-use medical device interactions in the anesthesia work environment. Human Automation Interaction: Research and Practice. Editors: Mouloua M, Koonce JM. Mahwah, New Jersey, United States: Lawrence Erlbaum Associates; 1997; 241-249.
2. Delson NJ, Koussa N, Hastings RH, **Weinger M**b. Quantifying Expert vs. Novice Skill in vivo for development of a laryngoscopy simulator. Medicine Meets Virtual Reality 11. IOS Press; 2003; 45-51.
3. Pratt N, Vo K, Ganiats TG, **Weinger MB**. San Diego Center for Patient Safety: Creating a successful patient safety research, education, and community collaborative. Advances in Patient Safety: From Research to Implementation. Volume 4. Programs, Tools, and Products. Editors: Henriksen K, Battles JB, Marks ES, Lewin DI. Rockville, Maryland, United States: AHRQ; 2005; 33-44. PMID: 21250040.
4. **Weinger MB**, Wiklund M, Garnder-Bonneau D. Handbook of Human Factors in Medical Device Design. Handbook of Human Factors in Medical Device Design. Editors: Weinger MB, Wiklund M, Garnder-Bonneau D. Boca Raton, Florida, United States: CRC Press; 2010 Dec; ISBN: 9780805856279.

Evidence-Based Guidelines

1. 1. Wiklund, M. E., Kendler, J., Hochberg, L., and **Weinger, M**. B.:. Technical Basis for User Interface Design of Health IT (NIST GCR 15-996). . 2015 Sep.

Presentations

Visiting Professor

1. Ward of the Twenty-First Century. University of Calgary and Alberta Health Services; Calgary, Canada. 2011 Mar 28; Human factors contributions to safer surgery.
2. Department of Anesthesiology, Childrenâ€™s Hospital of Philadelphia; Philadelphia, Pennsylvania. 2012 Sep 5; Cognitive biases in personal and professional decision making.
3. Department of Anesthesiology, Washington University, St. Louis School of Medicine; St. Louis, Missouri. 2012 Dec 18; Human factors research in healthcare: Making a difference.
4. Department of Anesthesiology, Columbia University School of Medicine; New York, New York. 2013 May 22; What every anesthesiologist needs to know about patient safety but is afraid to askâ€(Sydney Winchell Memorial Lecture) and â€œUnderstanding perioperative workâ€ (Research seminar).
5. Department of Surgery. Houston Methodist Hospital; Houston, Texas. 2014 Jul 8; Improving healthcare quality through human factors and simulation research.
6. Toronto, Canada. 2014 Sep 22; Human factors engineering in healthcare.

Invited Presentation - National

1. Chicago Beginnings: Health Care Risk in 2010. Willis Health Care Practice 14th Annual Forum; Chicago, Illinois. 2010 Jul 21; Medical simulation to reduce risk: Competency, communication, and culture.
2. Anesthesia Chiefs Conference. Department of Veterans Affairs; Las Vegas, Nevada. 2010 Sep 15; Risks of anesthesiology technology.
3. Anesthesia Chiefs Conference. Department of Veterans Affairs; Las Vegas, Nevada. 2010 Sep 15; Performance shaping factors in anesthesia care.
4. Human Factors and Ergonomics Society Annual Meeting. HFES; San Francisco, California. 2010 Sep 29; Arnold S. Small Safety Lecture. If not by you, who? Human factors contributions to perioperative patient safety.
5. Infusion Pump Summit. Food and Drug Administration/Association for the Advancement of Medical Instrumentation; Silver Springs, Maryland. 2010 Oct 5; Interface considerations for infusion technology.
6. FAER panel: Do the Missions of Education, Research, and Clinical Care Allow for Quality Excellence?. American Society of Anesthesiologists Annual Meeting; San Diego, California. 2010 Oct 18; Quality care: The new realities of multidisciplinary team care.

7. Post-Graduate Assembly. New York Society of Anesthesiologists; New York City, New York. 2010 Dec 13; Performance shaping factors in anesthesiology.
8. Consensus Conference. Anesthesia Patient Safety Foundation; Scottsdale, Arizona. 2011 Jun 8; Essential Monitoring Strategies to Detect Clinically Significant Drug-Induced Respiratory Depression in the Postoperative Period.
9. 142. Agency for Healthcare Research and Quality Technical Expert Panel on Computer-Based Decision Support (CDS), special session on CDS usability.. AHRQ; Rockville, Maryland. 2011 Aug 4; What will it take to make CDS more usable and used?.
10. American Nuclear Society 8th International Topical Meeting on Nuclear Plant Instrumentation, Control and Human Machine Interface Technologies.. American Nuclear Society; San Diego, California. 2012 Jul 23; Can nuclear power learn anything from healthcare â€¦ and vice versa?.
11. Workshop on the Safety of the Surgical Home. Scottsdale, Arizona. 2014 Sep 2; The perioperative surgical home: Will the glass be half empty or will we order cheeseburgers?.
12. American Society of Anesthesiologists Annual Meeting. Anesthesia Patient Safety Foundation; New Orleans, Louisiana. 2014 Sep 2; Competence and teamwork are not enough: Implementing emergency manuals and checklists.

Invited Presentation - International

1. 57 Congresso Brasileiro de Anestesiologia/7 Congresso de Dor da Sociedade Brasileria de Anestesiologia. Brazilian Society of Anesthesiology; Porto Allegro, Brazil. 2010 Nov 21; The development of a national database on adverse events in anesthesia.
2. 57 Congresso Brasileiro de Anestesiologia/7 Congresso de Dor da Sociedade Brasileria de Anestesiologia. Brazilian Society of Anesthesiology; Porto Allegro, Brazil. 2010 Nov 21; Simulation as a learning tool.
3. 57 Congresso Brasileiro de Anestesiologia/7 Congresso de Dor da Sociedade Brasileria de Anestesiologia. Brazilian Society of Anesthesiology; Porto Allegro, Brazil. 2010 Nov 22; The risks of anesthesia technology.
4. CME Congress 2012. Toronto, Canada. 2012 May 30; Human factors, patient safety, and a systems approach to continuous clinician learning.
5. CME Congress 2012. Toronto, Canada. 2012 May 30; Patient Safety and Human Factors Engineering in Continuing Medical Education.
6. Euroanaesthesia 2013 Congress. Barcelona, Spain. 2013 Jun 3; Non-routine events.
7. Xiangya International Forum on Simulation and Patient Safety.. Changsha, Hunan, China. 2013 Sep 13; Simulation research to advance medical education and patient care.
8. International Annual Meeting of the Human Factors and Ergonomics Societ. Human Factors and Ergonomics Societ; San Diego, California. 2013 Oct 3; â€œA tribute to Bentzi Karsh: Health information technology.
9. Sao Paulo Society of Anesthesiologist Annual State Meeting. Sao Paulo, Brazil. 2014 May 30; "Maintenance of competence in anesthesiology-fallacies and facts", "The design and use of anesthesia technology-help or hindrance?" "Learning from adverse events", and "Healthcare (cost) reform and patient safety".
10. 21st Annual Anesthesia Winterlude Symposium. Ottowa, Canada. 2015 Jan 31; Equipment design and human factors.

Invited Presentation - Other

1. American Society of Anesthesiologists Practice Management Conference. American Society of Anesthesiologists; Las Vegas, Nevada. 2013 Jan 26; Fatigue and sleep deprivation.
2. Human Factors and Ergonomics Society 2nd Annual Healthcare Symposium. Human Factors and Ergonomics Society; Baltimore, Maryland. 2013 Mar 11; The role of clinical simulation in medical device design and evaluationâ€ and â€œClinician workload and non-routine events in perioperative careâ€ and â€œTechnology related Non-Routine Events.â€.
3. Society for Pediatric Anesthesiology Annual Meeting.. Society for Pediatric Anesthesiology; Las Vegas, Nevada. 2013 Mar 16; â€œTechnology and safety in healthcareâ€ and Leader and presenter, â€œEvent analysisâ€ workshop.
4. Minnesota Society of Anesthesiologists Annual Meeting, Minneapolis, MN. Minnesota Society of Anesthesiologists; Minneapolis, Minnesota. 2013 Apr 19; â€œAnesthesia Provider Cognition and Fitness for Dutyâ€ and â€œMedical technology and patient safetyâ€.
5. Georgia Society of Anesthesiologists 2013 Summer Meeting. Georgia Society of Anesthesiologists; Hilton Head, South Carolina. 2013 Jul 19; â€œFitness for dutyâ€ and Meaningful use of Health Information Technology for anesthesiology.
6. International Annual Meeting of the Human Factors and Ergonomics Society. Human Factors and Ergonomics Society; San Diego, California. 2013 Oct 2; â€œA rewarding research career in healthcare human factors.

7. International Annual Meeting of the Human Factors and Ergonomics Society. Human Factors and Ergonomics Society; San Diego, California. 2013 Oct 3; Healthcare technology standards: AAMI HE-75, The Design of Medical Devices.
8. HIT Patient Safety Symposium at HIMSS. ECRI and AAMI; Orlando, Florida. 2014 Feb 23; Patient safety: Making healthcare safer-IT challenges and solutions: Incorporation safety risk management into IT processes and culture.
9. Human Factors in Healthcare. Chicago, Illinois. 2014 Mar 18; Safety and risk in health care and nuclear power: Learning from each other.
10. American Society of Anesthesiologists Simulation Education Network. Chicago, Illinois. 2014 May 2; Using research to improve practice.

Workshop

1. Karolinska Institute; Stockholm, Sweden. 2011 May 26; Human factors methods in healthcare.
2. American Society of Anesthesiologists Annual Meeting, APSF Board of Directors Workshop. ASA & APSF; Chicago, Illinois. 2011 Oct 15; Current Anesthesia Patient Safety Issues: Help Set the Priorities for Immediate Short-Term Resolution.

Panel Presentation

1. Human Factors and Ergonomics Society 54th Annual Meeting. HFES; Las Vegas, Nevada. 2011 Sep 20; Human Factors Training in Aviation and Healthcare â€" What We Know Works Best and How to put it into Practice.
2. Human Factors and Ergonomics Society 54th Annual Meeting. HFES; Las Vegas, Nevada. 2011 Sep 22; Integrating Human Factors into Everyday Healthcare Work.
3. Human Factors and Ergonomics Society 54th Annual Meeting. HFES; Las Vegas, Nevada. 2011 Sep 23; Simulation in Healthcare â€" One Size Fits All.
4. Anesthesia Professionals and the Use of Advanced Medical Technologies. Anesthesia Patient Safety Foundation.; Scottsdale, Arizona. 2013 Sep 18; The fallacy of the training panacea.

Presentations at Scientific Meetings

1. Samuel Ho; Matthew Weinger. AMIA 2016. AMIA; Chicago, Illinois. 2016 Nov 15; Workflow-guided development of a clinical decision support tool for patients with advanced liver disease.

Other

1. California Association of Nurse Anesthetists, Annual meeting; 1987 Feb; Charting and communication: the role of the automated anesthesia record.
2. American Society of Dental Anesthetists, Annual meeting; 1987 Mar; Anesthetic vigilance: human factors affecting the anesthetist's performance.
3. Association of University Anesthetists, Annual meeting; 1987 May; Localization of brainstem sites which may play a role in alfentanil-induced muscle rigidity in the rat.
4. Society for Neuroscience, Annual meeting; 1987 Nov; The role of serotonergic pathways in alfentanil-induced muscle rigidity in the rat.
5. University of California San Diego, Anesthesia Update 1988; 1988 Jan; The new intra-venous anesthetics.
6. Loma Linda University School of Dentistry, Ninth Annual Anesthesia Symposium; 1988 Feb; Intravenous analgesia and sedationâ€ and â€œHuman factors affecting anesthetic vigilance.
7. Society for Neuroscience Annual Meeting; 1988 Nov; MPV-1440, a highly-selective alpha-2 agonist, prevents opiate-induced muscle rigidity.
8. University of California San Diego, Anesthesia Update; 1989 Jan; Reversal agents in Anesthesia.
9. Farmos Dexmedetomidine Symposium; 1989 Oct; The effects of a combination of alfentanil and dexmedetomidine on cardiorespiratory function and rigidity in rats.
10. Society for Neuroscience, Annual Meeting; 1989 Nov; Mu, but not delta or kappa, opioid receptors mediate opiate-induced muscle rigidity in the rat.
11. University of California San Diego, Anesthesia Update 1990; 1990 Jan; Human factors affecting vigilance.
12. Medical College of Wisconsin, Update 1990; 1990 Feb; Dexmedetomidine, a selective alpha-2 agonist, does not potentiate the cardiorespir-atory depression of high-dose opiates in the rat.
13. California Medical Association Annual Meeting; 1990 Mar; Management of common cardiovascular problems in the ambulatory care setting.
14. McGill University / Royal Victoria Hospital, Dept. of Anesthesiology, Toronto, Ontario, Canada; 1990 Oct; Human factors affecting anesthesia vigilance.

15. Visiting Professor, University of Michigan Dept. of Anesthesiology; 1990 Oct; Human factors affecting the anesthesiologistâ€™s performance.
16. University of California San Diego, Anesthesia Update 1991; 1991 Jan; Automated anesthesia recordkeeping: is it going to help?.
17. California Society of Anesthesiologists, Case Conference; 1991 Mar; Postoperative respiratory distress following cholecystectomy. Intraoperative hypertension and ventricular tachycardia during emergency surgery.
18. Univ. of California, Los Angeles, Department of Anesthesiology, Anesthesia Practice 1991; 1991 Sep; Opiate-induced muscle rigidity.â€ and â€œHuman factors affecting anesthesiologist vigilance and performance.
19. Visiting Professor, Georgetown University Dept. of Anesthesiology and the Anesthesiology Section of the National Institutes of Health; 1991 Sep; Human factors affecting anesthesiologist vigilance and monitoring performance.
20. American Society of Anesthesiologists Annual Meeting, Panel presentation, sponsored by the Association of VA Anesthesiologists; 1991 Oct; What affects our ability to gather information?.
21. American Society of Anesthesiologists Annual Meeting, Panel presentation; 1991 Oct; Factors affecting the performance of the trauma anesthesiologist.
22. Society for Technology in Anesthesia Annual Meeting; 1992 Jan; Human factors in the design of visual display technologies for anesthesiology.
23. University of California San Diego, Anesthesia Update 1992; 1992 Jan; Alpha-2 agonists in anesthesia.
24. 12th Vail Monitoring and Technology Meeting; 1992 Mar; Intraoperative task analysis and workload assessment for optimizing anesthesiologist and monitoring equipment performance.
25. Association of VA Nurse Anesthetists Annual Meeting; 1992 Apr; Human factors affecting performance of anesthesia personnel.
26. Visiting Professor, State University of New York at Buffalo; 1992 Jun; Anesthesia ergonomics: factors affecting vigilance and monitoring performance: I. Human and task factors; II. Equipment and system factors.
27. Society for Neurosciences, Annual meeting; 1992 Oct; The neuropharmacology of opiate-induced muscle rigidity in the rat.
28. American Society of Anesthesiologists Annual meeting, Panel presentation; 1992 Oct; The impact of the anesthesia task on vigilance.
29. New York Society of Anesthesiologists, Postgraduate Assembly, Panel presentation; 1992 Dec; Performance shaping factors.
30. University of California San Diego, Anesthesia Update 1993; 1993 Jan; Whatâ€™s new in opiates?.
31. Society for Technology in Anesthesia, Annual meeting (APSF-sponsored conference on Human Performance and Anesthesia Technology), Panel presentation; 1993 Feb; Performance Shaping Factors.
32. Association of University Anesthetists, Annual meeting; 1993 May; Preliminary studies on the central effects of opioid receptor-selective agonists in the spontaneously ventilating rat: I. Effects on ventilation.
33. Visiting Professor, University of Utah; 1993 May; Anesthesia ergonomics: factors affecting vigilance and monitoring performance. Opiate-induced muscle rigidity: patho-physiology and clinical implications.
34. Visiting Professor, University of Pittsburgh; 1993 Oct; Anesthesia ergonomics. Opiate-induced muscle rigidity: pathophysiology and clinical implications.
35. Emtek Corp, Tempe, AZ; 1993 Nov; Automated anesthesia recordkeeping.
36. University of California San Diego, Anesthesia Update 1994; 1994 Jan; Human error and decision making in anesthesia.
37. Cardiothoracic Research and Educational Foundation (CREF), 14th Annual San Diego Cardiothoracic Surgery Symposium; 1994 Feb; Factors affecting intraoperative performance.
38. Society of Cardiovascular and Interventional Radiology Annual Meeting, San Diego, CA.; 1994 Mar; Principles of conscious sedation.
39. Thirteenth Medical Monitoring Technology Conference, Vail, CO; 1994 Mar; Human factors in anesthesia. Designing for error. Equipment testing and validation.
40. University of California San Diego, Anesthesiology Review Course; 1994 May; Opiates: Basic principles and pharmacology. Opiates: Clinical applications.
41. Visiting Professor, University of Rochester, Department of Anesthesiology; 1994 Sep; Factors affecting anesthesia provider performance. Opioid receptor pharmacology in Opiate Anesthesia.
42. University of California San Diego, Department of Radiology, 14th Annual Interventional Radiology Course; 1994 Oct; Principles of conscious sedation.

43. Society for Neurosciences, Miami Beach, FL; 1994 Nov; Focal electrical stimulation increases muscle rigidity.
44. University of California San Diego, Anesthesia Update 1995; 1995 Jan; Monitoring the anesthesia work environment.
45. Visiting Professor, University of Maryland Dept. of Anesthesia; 1995 May; Factors Influencing Anesthesiologist Performance. Frontiers in Opiate Pharmacology.
46. ITCCAS. Eighth Annual Trauma Anesthesia and Critical Care Symposium. Baltimore, MD; 1995 May; Human Factors in Crisis Management.
47. Society of Anesthesiologists of the Republic of China (SAROC) Annual Congress; 1995 Sep; The impact of health care reform on anesthesiologists and their patients: an ergonomic perspective.
48. American Society of Anesthesiologists Annual Meeting, Panel presentation, Atlanta, GA; 1995 Oct; Performance Shaping Factors.
49. Human Factors and Ergonomics Society Annual Meeting, Panel presentation, San Diego, CA; 1995 Nov; Warnings in Medicine: Perspective on Alarms in Anesthesia.
50. Society for Neurosciences Annual Meeting, San Diego, CA; 1995 Nov; Pharmacology of delta opioid receptor agonists in the rat.
51. University of California San Diego, Anesthesia Update 1996; 1996 Jan; The CNS Effects of Intravenous Anesthetics.
52. Second Automation, Technology, and Human Performance Conference. Cocoa Beach, FL; 1996 Mar; Human-user medical device interaction in the anesthesia work environment.â€ â€œAutomation and the professional user: anesthesiology: perspectives and considerations.
53. Food and Drug Administration (FDA), Washington D. C. Presentation to the Advisory Panel on Anesthesiology.; 1996 Apr; Remifentanil: Outpatient Studies.
54. Association of University Anesthetists Annual Meeting, Boston, MA; 1996 May; Delta opioid receptor agonists show a clinically promising in vivo dose-effect profile for analgesia vs. side-effects in the rat.
55. Conference on Examining Errors in Healthcare (sponsored by AHCPR, JCAHO, and others), Rancho Mirage, CA; 1996 Oct; Scientific measurement of anesthesiologistsâ€™ performance.
56. University of California San Diego, Anesthesia Update 1997; 1997 Jan; The impact of health care reform on cost and quality in anesthesia.
57. Yale University Department of Anesthesiology, 3rd Anaesthesia and Critical Care Symposium, Killarney, Co. Kerry, Ireland; 1997 Sep; Understanding anesthetic mishaps.
58. American Society of Anesthesiologists, Annual meeting, Panel Presentation, San Diego, CA; 1997 Oct; Anesthesia Vigilance.
59. Health Services Research Seminar Series, Division of Health Sciences, Department of Family and Preventative Medicine, UCSD; 1998 Jan; Human factors and clinical performance assessment.
60. Second Annual Conference on Enhancing Patient Safety and Reducing Errors in Health Care, Rancho Mirage, CA; 1998 Nov; Evaluation of the effects of fatigue and sleepiness on clinical performance in on-call anesthesia residents during actual night time cases and in simulated cases.
61. University of California San Diego, Anesthesia Update 1999; 1999 Jan; Enhancing your power and influence on the OR team.
62. Medical Design and Manufacturing West 99, Anaheim, CA; 1999 Jan; The clinicianâ€™s view: User-centered design makes a difference.
63. Visiting Professor, University of Arizona Department of Anesthesiology, Tucson, AZ; 1999 Jun; Getting the Job You Want. Human Error in the Operating Room.
64. Human Factors and Ergonomics Society 43rd Annual Meeting, Colloquium Presentation, Houston, TX; 1999 Sep; Human Factors Issues in the Operating Room.
65. 13th Annual Kaiser Permanente Anesthesia Symposium, San Francisco, CA; 1999 Nov; How will new technology change our work environment?.
66. Workshop on Clinical Information Visualization, University of Utah, Salt Lake City, UH; 1999 Dec; Overview of display issues in anesthesiology.
67. University of California San Diego, Anesthesia Update 2000; 2000 Jan; Human, environmental, and system factors affecting clinical decision making.
68. Society for Cardiovascular Anesthesia, Annual Program, Orlando, FL; 2000 May; Impact of transesophageal echocardiography on expert performance.
69. Partnership for Patient Safety â€" Building Systems that Do No Harm: Advancing Patient Safety Through Partnership and Shared Knowledge, Dallas, TX; 2000 Jun; A human factors approach to medical device design to enhance patient safety.
70. International Ergonomics Association 14th Triennial Congress and the Human Factors and Ergonomics Society 44th Annual Meeting, Panel presentation, San Diego, CA; 2000 Jul; Designing for medical work domains: Challenges, directions, and opportunities.

71. International Ergonomics Association 14th Triennial Congress and the Human Factors and Ergonomics Society 44th Annual Meeting, Symposium, San Diego, CA; 2000 Aug; Auditory warnings in the medical work domain.
72. International Ergonomics Association 14th Triennial Congress and the Human Factors and Ergonomics Society 44th Annual Meeting, Panel presentation, San Diego, CA; 2000 Aug; Global standardization of human factors for medical devices and systems.
73. American Society of Anesthesiologists Annual Meeting, Panel presentation, San Francisco, CA; 2000 Oct; Whatâ€™s wrong with our current physiological displays.
74. Anesthesia Patient Safety Foundation, Board of Directors Retreat, San Francisco, CA; 2000 Oct; A utopian perioperative system.
75. Food and Drug Administration, Center for Devices and Radiological Health; 2001 Feb; A Clinical Perspective on Integrating Human Factors Engineering Into Medical Device Design and Development. A live interactive videoconference for medical device manufacturers.
76. AAMI/FDA 11th Annual International Conference on Device Standards and Regulation, Arlington, VA; 2001 Jun; Human Factors Engineering: A Look at the Revisions and Regulatory Implications of the AAMI Standard.
77. American Medical Informatics Association: AMIA 2001 Symposium, Washington, D.C.; 2001 Nov; Human factors research in anesthesia patient safety.
78. Society for Technology in Anesthesia Annual meeting, Santa Clara, CA; 2002 Jan; Whatâ€™s wrong with current IV drug delivery processes?.
79. University of California San Diego, Department of Medicine Grand Rounds; 2002 Feb; Patient safety: A systems problem.
80. European Society of Anaesthesiologists 10th Anniversary Meeting, Euroanaesthesia 2002, Nice, France; 2002 Apr; How to improve anaesthesia equipment.
81. Chang Gung Memorial Hospital, Chang Gung University, Taipei, Taiwan; 2002 May; Anesthesia ergonomics: Understanding the factors affecting quality of care.
82. Visiting Professor, University of Pittsburgh, Department of Anesthesiology, Pittsburgh, PA; 2002 May; Current advances in anesthesia patient safety.
83. Agency for Healthcare Research and Quality (AHRQ) and University of Maryland Shock-Trauma Center, Video as Research Data Conference, Baltimore, Maryland; 2002 Sep; Video capture of anesthesia non-routine events.
84. SAFER California Healthcare 1st Annual Patient Safety Summit, Panel presentation, Orange County, CA; 2002 Sep; Enhancing safety at the point of care.
85. Human Factors and Ergonomics Society Annual Meeting, Panel presentation, Baltimore, MD; 2002 Oct; Human factors contributions to patient safety.
86. Society for Technology Annual Meeting, San Diego, CA; 2003 Jan; Assessing the impact of reading on anesthesia providersâ€™ vigilance, clinical workload, and task distribution.
87. University of California San Diego, Anesthesia Update 2003; 2003 Jan; Simulation training: How good can you become?.
88. University HealthSystem Consortium, Management and Supply Services Forum 2003, Respiratory Therapy Council Meeting, Scottsdale, AZ; 2003 Feb; Patient safety: Evidence for a systems problem.
89. VA Health Services Research and Development Service National Meeting, Washington, D.C.; 2003 Feb; Non-routine events and factors affecting anesthesia patient safety.
90. San Diego Center for Patient Safety, 1st Annual San Diego Patient Safety Conference, La Jolla, CA; 2003 Mar; Introduction to the San Diego Center for Patient Safety. Patient Safety at the Sharp End â€“ Anesthesia and Critical Care.
91. National Patient Safety Foundation, 5th Annual Patient Safety Congress, Washington, D.C.; 2003 Mar; Videoanalysis of anesthesia non-routine events.
92. Centers for Disease Control, 2003 Quality Institute Conference, Atlanta, GA; 2003 Apr; Laboratory medicineâ€™s role in patient safety at the â€˜sharp endâ€™: One clinicianâ€™s perspective.
93. Naval Medical Center San Diego, Department of Anesthesiology, Grand Rounds; 2003 May; Anesthesia patient safety.
94. Association of University Anesthesiologistâ€™s 50th Anniversary Meeting, Milwaukee, WI; 2003 May; A human factors approach to anesthesia patient safety research: Understanding non-routine events and clinical decision making.
95. Visiting Professor, University of Michigan Department of Anesthesiology, Ann Arbor, MI; 2003 Nov; Update on anesthesia patient safety.
96. Wake Forrest University/Bowman Gray School of Medicine Department of Anesthesiology, Update in Physiology and Pharmacology, Sea Island, GA; 2003 Nov; Fatigue and sleep deprivation in anesthesiology: Does it matter?.
97. Taiwan Patient Safety Symposium 2003, Linkou, Taiwan, ROC; 2003 Dec; An introduction to medical simulation.

98. Visiting Professor, Washington University St. Louis Department of Anesthesiology. St. Louis, MO; 2003 Dec; Understanding patient safety at the sharp end.

99. Society for Technology in Anesthesia Annual Meeting, Santa Fe, New Mexico; 2004 Jan; A human factors design process for medical devices and systems.

100. University of California, San Diego, Department of Medicine, Topics and Advances in Internal Medicine; 2004 Feb; A systems approach to understanding and improving patient safety.

101. Visiting Professor, Emory University Department of Anesthesiology. Atlanta, GA; 2004 Apr; Advances in patient safetyâ€ and â€œClinician fatigue and sleep deprivation: Does it really matter?.

102. National Patient Safety Foundation, 6th Annual Patient Safety Congress. Boston, MA; 2004 May; Simulation in patient safety research.

103. Agency for Healthcare Research and Quality, Third Annual Patient Safety Conference. Washington, DC; 2004 Sep; Video Tools and Techniques for Patient Safety Education and Training Panel.

104. Agency for Healthcare Research and Quality, Third Annual Patient Safety Conference. Washington, DC; 2004 Sep; Simulation in Safety Research & Training.

105. Human Factors and Ergonomics Society 48th Annual Meeting, Panel presentation, New Orleans, LA; 2004 Sep; The role of human factors in healthcare in 2020.

106. Human Factors and Ergonomics Society 48th Annual Meeting. New Orleans, LA; 2004 Sep; Presidentâ€™s Forum: The role of human factors and ergonomics in the emerging healthcare crisis.

107. Sharp Healthcare, Second Annual Patient Safety Conference, San Diego, CA; 2004 Sep; Using simulations to improve patient safety.

108. Visiting Professor, Massachusetts General Hospital Department of Anesthesiology. Boston, MA; 2004 Oct; Non-routine events in anesthesiology.

109. Vanderbilt University, Department of Anesthesiology, Grand Rounds, Nashville, TN; 2005 Jan; Understanding Patient Safety at the Sharp End: A Human Factors Approach.

110. International Meeting on Medical Simulation, Miami, FL; 2005 Jan; Observing and Measuring Behavior â€" Where Angels Fear to Tread.

111. Anesthesiology Update 2005, San Diego, CA; 2005 Jan; Improving Personal Job Satisfaction.

112. AAMI/FDA International Standards Conference, panel presentation, Reston, VA; 2005 Mar; Human Factors and Patient Safety: Discussion of National and International Standards.

113. International Anesthesia Research Society, panel presentation, Honolulu, HI; 2005 Mar; OR of the Future: Challenges and Opportunities.

114. American Society of Quality: Tennessee Chapter, Nashville, TN; 2005 Mar; THE HUMAN FACTOR: How Humans Can Make or Break Safety (and Quality).

115. AAMI Human Factors Engineering, Ergonomics, and Patient Safety for Medical Devices Conference. Washington, DC; 2005 Jun; Human Factors Engineering and Patient Safety: The Clinicianâ€™s Perspectiveâ€ and â€œLegal and Liability Risks in Medical Device Design.

116. AHRQ Patient Safety and Informatics Conference, Panel presentation, Washingon DC; 2005 Jun; Informatics and Human Performance in Healthcare: Blessing or Curse?.

117. Human Factors and Ergonomics Society 49th Annual Meeting. Orlando, FL; 2005 Sep; Informatics in Health Care: The Good, the Bad, and the Ugly.

118. US Food and Drug Administration, MedSun Annual Conference. San Diego, CA; 2005 Oct; Whatâ€™s Wrong with the IV Therapy? Understanding Medical Device Use Errors.

119. Yokohama City University School of Medicine. Yokohama, Japan; 2005 Nov; Introduction to Patient Safety/Understanding Patient Safety.

120. Visiting Professor, University of Wisconsin, Department of Industrial Engineering. Madison, WI; 2005 Nov; Understanding Patient Safety at the Sharp End. A Human Factors Approach to Studying Medical Work.

121. Visiting Professor, The Ohio State University, Institute of Ergonomics (Department of Industrial Engineering). Columbus, OH; 2006 Apr; Profiles in Outrage: Medical device design failures. A human factors approach to understanding medical work.

122. Laerdal Simulation User Group Meeting. Salt Lake City, UT; 2006 Apr; Simulation and Patient Safety.

123. Global Harmonization Task Force (GHTF) Annual Conference on Design for Patient Safety. Workshop Co-Leader (with Michael Wiklund), Lubeck, Germany; 2006 Jun; Design for Safety 1 and 2.

124. Global Harmonization Task Force (GHTF) Annual Conference on Design for Patient Safety, Plenary Session Speaker, Lubeck, Germany; 2006 Jun; Post-Market Surveillance.

125. Institute for Healthcare Improvement, Health Professions Collaborative Meeting, Panel Organizer, Moderator, and Speaker, Nashville, CA; 2006 Oct; Simulation to enhance interdisciplinary education of healthcare professionals.

126. North Carolina Society of Anesthesiologists, Fall Session XXVI: Make My Day: Complications in Anesthesia Practice. Myrtle Beach, South Carolina; 2006 Oct; Workload Issues: Why canâ€™t I be 100% all of the time?.
127. International Meeting on Healthcare Simulation, Panel presentation, Orlando, FL; 2007 Jan; Some (hopefully provocative) thoughts on the future of SPs in healthcare.
128. Tennessee Society of Anesthesiologists Annual Meeting, Nashville, TN; 2007 Feb; Why canâ€™t I be 100% all of the time? Performance shaping factors in anesthesia.
129. Keynote Speaker, Brody School of Medicine, Eastern Carolina University, Keeping our Patients Safe: The Role of Simulation in Healthcare Education. Greenville, NC; 2007 Apr; Simulation in patient safety: The Vanderbilt experience.
130. Visiting Professor, University of North Carolina Department of Anesthesiology Grand Rounds, Raleigh-Durham, NC; 2007 May; Why canâ€™t I be 100% all of the time? Performance shaping factors in anesthesia.
131. Keynote Speaker, University of California, San Diego School of Medicine Alumni Reunion, San Diego, CA; 2007 Sep; Understanding Patient Safety at the Sharp End.
132. Wake Forrest University Department of Anesthesiology, 13th Annual Advances in Physiology and Pharmacology in Anesthesia and Critical Care, Hilton Head, SC; 2007 Oct; Pain free, but at what cost? Anesthesia Provider Cognition and Fitness for Duty.
133. Human Factors and Ergonomics Society 51st Annual Meeting, Baltimore, MD; 2007 Oct; Simulation Training for Rapid Assessment and Improved Teamwork - Lessons Learned from a Project Evaluating Clinical Handoffs.
134. Visiting Professor, University of Louisville Department of Anesthesiology, Louisville, KY; 2007 Dec; Anesthesia Patient Safety: Understanding Medical Error and the Factors Affecting Clinical Performance.
135. Arizona State Society of Anesthesiologists, 34th Annual Scientific Meeting. Scottsdale, AZ; 2008 Feb; Performance Shaping Factor: Why arenâ€™t we 100% all of the time. The risks of post-operative opioids. Perioperative teamwork and communication.
136. Emory University Department of Anesthesiology, New Horizons in Anesthesiology, Steamboat Springs, CO; 2008 Feb; Decision making in Anesthesiology, and in life. Making medical technology more user friendly.Perioperative teamwork and communication. Sleepy people putting people to sleep.
137. National Patient Safety Foundation, 2008 Annual NPSF Patient Safety Congress. Nashville, TN; 2008 May; How To Use Simulation to Move Your Patient Safety Agenda Forward: Overcoming barriers to using simulation for patient safety.
138. 1st International Conference on Human Engineering in Patient Safety, Strasbourg, France; 2008 Jun; Non-routine events in healthcare.
139. University of Arizona and the McDonnell Foundation, Cognitive Basis for Safe Practice: Rethinking Error in Critical Care, Phoenix, AZ; 2008 Sep; System interactions, coordination, and ICU safety.