

Mary D Patterson MD, MEd

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marydpatterson84@gmail.com

Education and Medical Training

SEIPS-Short Course on Human Factors Engineering And Patient Safety University of Wisconsin at Madison	2007
Executive Fellowship Program in Patient Safety Williamson Institute, Virginia Commonwealth University, Richmond, VA	2005-2006
MEd University of Cincinnati Cincinnati Children's Hospital Cincinnati, OH	2002-2005
Graduate non-degree Medical College of Wisconsin Center for the Study of Bioethics Graduate School, Milwaukee, WI: 6 credits Clinical topics in Bioethics Law and Bioethics	2001-2002
Pediatric Emergency Medicine Fellowship Children's National Medical Center Washington, DC	1990-1992
Pediatric Residency Nationwide Children's Hospital Columbus, OH	1984-1987
Doctor of Medicine Pennsylvania State University College of Medicine Hershey, PA	1980-1984

Undergraduate Degree

Pennsylvania State University
BS, Magna Cum Laude
State College, PA

1977-1980

Current Position

Associate Dean of Experiential Learning
Director of UF Center for Experiential Learning and Simulation
Lou Oberndorf Professor of Healthcare Technology
Professor of Pediatric Emergency Medicine
University of Florida
Gainesville, Florida

2018-present

Responsibilities: Develop and expand experiential learning opportunities for healthcare profession students. Lead, develop and expand interdisciplinary simulation program integrated with patient safety and focusing on technical and non-technical skills, team performance, human factors and system competencies for UF Shands Health. Responsibilities include expansion and design of simulation program, hiring and training personnel, development and evaluation of simulation experiences and research. Develop strategies and programs to fulfill healthcare students, trainees and practicing professionals and fulfill institutional priorities.

Professional Work History

Professor of Pediatrics and Emergency Medicine
George Washington University School of Medicine
Associate Vice Chair Medical Education
Executive Director of Simulation and
Children's Academy of Pediatric Educators
Children's National Medical Center
Washington, DC

2015-2018

Responsibilities: Lead, develop and expand interdisciplinary simulation program integrated with patient safety and focusing on technical and non-technical skills, team performance, human factors and system competencies. Responsibilities included expansion and design of simulation program, hiring and training personnel, development and evaluation of simulation experiences and budget management. Develop strategies and programs to fulfill regulatory and other institutional priorities. Specifically related to patient safety, we design simulations to identify system issues and latent safety threats and responded to near misses and serious safety events.

In addition, direct Children's Academy of Pediatric Educators focused on recognition and development of interdisciplinary educators in the field of educational research.

Medical Director 2011-2015
Simulation Center for Safety and Reliability
Akron Children's Hospital
Professor of Pediatrics
Northeast Ohio Medical University
Akron, OH

Responsibilities: Developed, and led interdisciplinary simulation program integrated with patient safety and focusing on technical and non-technical skills, team performance, human factors and system competencies. Responsibilities included development and design of simulation program, hiring and training personnel, development and evaluation of simulation experiences and budget management. Specifically related to patient safety, we designed simulations to identify system issues and latent safety threats and responded to near misses and serious safety events.

Medical Director 2002-2011
Cincinnati Children's Center for Simulation and Research
Cincinnati Children's Hospital
Assistant then Associate Professor of Pediatrics
University of Cincinnati
Cincinnati OH

Responsibilities: Developed, and led multidisciplinary simulation program integrated with patient safety and focusing on technical and non-technical skills, team performance, human factors and system competencies. Responsibilities included development and design of simulation program, hiring and training personnel, development and evaluation of simulation experiences and budget management. Specifically related to patient safety, we designed simulations to identify system issues and latent safety threats and responded to near misses and serious safety events. Developed research program and obtained external funding for the research program.

Clinical Associate Emergency Medicine 2013-2015
Pediatric Emergency Medicine Faculty 1997-2011
Cincinnati Children's Hospital
Associate Professor of Pediatrics 2005-2011
Assistant Professor of Pediatrics 1997--2004

University of Cincinnati
Cincinnati, OH

Assistant Professor of Emergency Medicine and Pediatrics 1995-1997
Director, Pediatric Emergency Department
Wake Forest University School of Medicine
Winston-Salem, NC

Assistant Professor of Pediatrics 1992-1995
Assistant Medical Director, Emergency Medical Trauma Center
George Washington University
Children's National Medical Center
Washington, DC

Instructor in Pediatrics, 1987-1990
Uniformed Services University of Health Sciences
Bethesda, MD

Staff Pediatrician, United States Air Force 1987-1990
Malcolm Grow USAF Medical Center,
Andrews Air Force Base, MD

Quality Assurance/Risk Management Monitor, 1988-1990
Director, Inpatient Services
Department of Pediatrics,
Malcolm Grow USAF Medical Center
Andrews Air Force Base, MD

Clinical Instructor in Pediatrics 1984-1990
Ohio State University, Columbus, OH

Licensure and Certifications

Pediatric Emergency Medicine 1992-present
American Board of Pediatrics

General Pediatrics 1988-present
American Board of Pediatrics

Advanced Cardiac Life Support 1989, 2013, 2015

Advanced Trauma Life Support	1988-present
Advanced Trauma Life Support Instructor	1989-2014
Pediatric Advanced Life Support Instructor	1988-present
PEPP instructor and coordinator	2000-2010
Licensure: Florida	2018-present
Ohio: # 35-05-4632	1986-present
Maryland D0080453	2015-present
Washington, DC MD043534	2015-present
Kentucky: (inactive)	
North Carolina: (inactive)	

Professional Memberships

Global Network of Simulation in Healthcare Project Lead: Toolkit Development	2016-present
Human Factors and Ergonomics Society	2014-present
International Perinatal and Pediatric Simulation Society Board of Directors	2010-present 2015-2017
Resilient Health Care Society Executive Committee Member at Large	2011-present 2020-present
Society for Simulation in Health Care	2004-present
Chair, SSH Advisory Council	2016-2019
Chair, Safety II and Resilience Engineering Special interest Group	2017-present
Co-Chair Academy Selection Committee	2015-present
Vice Chair: Certification	2013-2016
Terminology Committee (Simulation Dictionary Contributor)	2014-2016
Bylaws Revision	2012
Representative to AAMC	2012
Board of Directors, Executive Committee- President	2006-2011 2010
President-elect	2009

Secretary	2007-2009
Nominations Committee chair	2007-2009
BOD liaison: Certification, Accreditation and Technology Standards Committee	2010-2011
Chair, Membership and Bylaws Committee	2005-2007
American Academy of Pediatrics Member: Section on Emergency Medicine	1990-present
Honors	
Executive Committee member at large The Resilient Healthcare Society	2020
International Society of Quality in Healthcare Expert	2019
Induction as Fellow of the Academy of the Society for Simulation in Healthcare	2018
Society for Simulation in Healthcare Presidential Citation for Extraordinary Achievements, Leadership and Efforts to Advance the Mission and Goals Of SSH	2012
Pediatric Emergency Medicine Attending of the Year By Pediatric Emergency Medicine Fellows Akron Children's Hospital	2012
Golden Apple Award for Excellence in Medical Education to the Center for Simulation and Research The Office of Continuing Medical Education Cincinnati Children's Hospital	2010
Division Teaching Award to Emergency Medicine Cincinnati Children's Hospital Medical Center Housestaff	1999, 2001, 2004, 2007, 2010
Pediatric Golden Apple Teaching Award (individual) University of Cincinnati Emergency Medicine Housestaff	2002
Pediatric Golden Apple Teaching Award (individual) University of Cincinnati Emergency Medicine Housestaff	2000

Golden Apple Teaching Award The Emergency Medical Trauma Center Children's National Medical Center	1993
Attending of the Year, Housestaff of Malcolm Grow USAF Medical Center	1989
Service	
International	
Patterson M. First opponent; PhD Defense of Malin Glette University of Stavanger, Norway June 23, 2020	
(Previous 5 years only: complete listing available on request)	
National	
Healthcare Safety and Quality Improvement Research Study Section Agency for Healthcare Research Chair	10/2015-6/2017
Member	2011-2015
Member Agency for Healthcare Research Healthcare Technology and Dissemination Sciences Study Section	2009-2011
Advisor to POISE (Pediatric Outcomes in Simulation Education) Network, now incorporated as part of the INSPIRE (International Network for Simulation-based Pediatric Innovation, Research and Education)	2011-present
SSH International Committee on Simulation Education Certification	2008-2010
SSH International Committee on Simulation Instructor Certification	2010
Local	
COM Curriculum Committee University of Florida	2018-present
COM Clerkship Committee University of Florida	2018-present

Emergency Medicine Promotion Committee University of Florida	2019- present
Patient Safety Committee Children’s National Medical Center	2015-2018
Clinical Care Committee Children’s National Medical Center	2015-2018
Late Rescue Steering Committee Children’s National Medical Center	2016-2018
Graduate Medical Education Committee Children’s National Medical Center	2016-2018
Medical Staff Performance Improvement Committee Akron Children’s Hospital	2013-2015
Serious Safety Event Review and Classification Committee Akron Children’s Hospital	2011-2015

Publications and Research

Peer Reviewed

Payne AS, Pavuluri P, Sten MB, Corriveau C, Berkowitz DA, Sarnacki R, Soghier L, **Patterson MD**, Ottolini, MC. Multimodal Quality Improvement Curriculum for Pediatric GME Program Directors. American Journal of Medical Quality. May 31, 2020
<https://doi.org/10.1177/1062860620929419>

Deutsch ES, Patterson **MD**. Simulation Saves the Day (and Patient)..Otolaryngol Clin North Am. 2019 Feb;52(1):115-121. doi: 10.1016/j.otc.2018.08.005. Epub 2018 Sep 22.

Deutsch E, **Patterson MD**, Perry SJ. A New Pairing: Root Cause and Success Analysis. Pa Patient Saf Advis 2018 Sep;15(3).

Bajaj, Komal; Minors, Anjolette; Meguerdichian, Michael; **Patterson, Mary**. “No Go Considerations for In Situ Simulation Safety. Simul Healthc. 2018 Jun;13(3):221-224. doi: 10.1097/SIH.0000000000000301

Geis, Gary L.; Wheeler, Derek S.; Bungler, Amy; Militello, Laura G.; Taylor, Regina G.; Bauer, Jerome P.; Byczkowski, Terri L.; Kerrey, Benjamin T.; **Patterson, Mary D.** A Validation Argument for a Simulation-Based Training Course Centered on Assessment, Recognition, and Early Management of Pediatric Sepsis. *Simul Healthc.* 2018 Feb;13(1):16-26. doi: 10.1097/SIH.0000000000000271.

Kahlenberg L, Watson L, **Patterson M**, Wachsberger D et al. Implementation of a Modified WHO Pediatric Procedural Sedation Safety Checklist and Its Impact on Risk Reduction. *Hospital Pediatrics.* November 2017; 7: 4: 225-231

Dieckmann P, Patterson M, Lahlou S, Mesman J, Nyström P, Krage R. Variation and adaptation: learning from success in patient safety-oriented simulation training. *Adv Simul (Lond).* 2017 Oct 31;2:21. doi: 10.1186/s41077-017-0054-1

Biddell EA, Vandersall BL, Bailes SA, Estephan SA, Ferrara LA, Nagy KM, O'Connell JL, **Patterson MD.** Use Of Simulation To Gauge Preparedness For Ebola At A Free Standing Children's Hospital. *Simulation in Healthcare.* April 2016 : 11: 2: 94–99

Patterson MD, Militello LG, Bungler A, Taylor R, Wheeler DS, Klein G, Geis G. Leveraging the Critical Decision Method to Develop Simulation-based Training for Early Recognition of Sepsis. *Journal of Cognitive Engineering and Decision Making.* March 2016 10: 36-56, doi:10.1177/1555343416629520

Stone K , **Patterson MD**, Reid JR, Geis GL, Auerbach M, Simulation to Improve Patient Safety in Pediatric Emergency Medicine . *Clinical Pediatric Emergency Medicine.* Volume 17, Issue 3, September 2016, Pages 185-192

Deutsch E, **Patterson MD.** Safety I, Safety II and Resilience Engineering. *Current Problems in Pediatric and Adolescent Health.* p382–389 Published online: November 5 2015

Auerbach M, Kessler D, Patterson M. The Use of In-Situ Simulation to Detect Latent Safety Threats in Pediatrics: A Cross-Sectional Survey. *BMJ Simulation & Technology Enhanced Learning.* Published Online First: 3 November 2015 doi:10.1136/bmjstel-2015-000037

Deutsch E, **Patterson M.** The 160 Lb Computer That Can Be Mass Produced By Unskilled Labor. *Pennsylvania Patient Safety Advisory.* Sep;12(3):49-53.2015

Patterson M, Wears R. Resilience and Precarious Success. Reliability Engineering and System Safety. Online publication complete: 26-Mar-2015:
<http://dx.doi.org/10.1016/j.res.2015.03.014i>

Jain AL, Jones K, Simon J, **Patterson MD**. The Impact Of A Daily Pre-Operative Surgical Huddle On Interruptions, Delays, And Surgeon Satisfaction In An Orthopedic Operating Room: A Prospective Study. Patient Safety in Surgery 9:8 DOI 10.1186/s13037-015-0057-6, 2015

Patterson M, Geis G, On the Move; Simulation to Improve and Assure Transport Team Performance. Clinical Pediatric Emergency Medicine. Clinical Pediatric Emergency Medicine. 14 (3) 214-222; 2013

Wheeler DS, Geis GL, Mack EH, LeMaster T, **Patterson, MD**. High Reliability Emergency Response Teams in the Hospital: Improving Quality and Safety Using In Situ Simulation Training. BMJ Qual Saf. 2013 Jun;22(6):507-14. doi: 10.1136/bmjqs-2012-000931. Epub 2013 Mar 1.

Patterson MD, Geis, GL, Falcone RA, LeMaster T, Wears R. In Situ Simulation: Detection of Safety Threats and Teamwork Training in a High Risk Emergency Department. BMJ Qual Saf. 2013 Jun;22(6):468-77. doi: 10.1136/bmjqs-2012-000942. Epub 2012 Dec 20.
PMID: 23258390

Patterson MD, Geis, GL, LeMaster T, Wears R. Impact of Multidisciplinary Simulation-Based training on Patient Safety in a Pediatric Emergency Department. BMJ Qual Saf. 2013 May;22(5):383-93. doi: 10.1136/bmjqs-2012-000951. Epub 2012 Dec 20.
PMID: 23258388

Geis GL, Moyer, MR, Pio B, Pendergrass TL, **Patterson, M**. Simulation to assess the safety of new healthcare teams and new facilities . Simulation in Healthcare, 6 (3) 125-133; 2011

Spanos S, **Patterson M**. An unexpected diagnosis: Simulation reveals unanticipated deficiencies in resident dysrhythmia knowledge. Simulation in Healthcare 5: 21–23; 2010

Patterson M, Geis G, Manos J, Moyer M, Pio P et al. The Use of In Situ Simulation for the Detection of Safety Threats in a Pediatric Emergency Department. Simulation in Healthcare 2008; 3:284.

Kobayashi L, Overly FL, Fairbanks RJ, **Patterson, M**, et al. Advanced Medical Simulation Applications For Emergency Medicine Microsystems Evaluation and Training Acad Emerg Med 2008; 15: 1058-1070.

Ruddy RM, **Patterson MD**, Medical simulation: A Tool For Recognition Of And Response To Risk. *Pediatric Radiology* 2008 Sep 23. /s00247-008-0951-5

Falcone RA, Daugherty M, Schweer L, **Patterson M**, Brown RL, Garcia VF. Multidisciplinary Pediatric Trauma Team Training Utilizing High Fidelity Trauma Simulation, *Journal of Pediatric Surgery*. 43(6) 1065-1071 June, 2008

Kobayashi L, **Patterson M**, Overly, F, Shapiro, M, Williams K, Jay G. Educational and Research Implications of Portable Human Patient Simulation in Acute Care Medicine *Acad Emerg Med* 2008; 15: 1166-1174.

Patterson, M, Blike, G, Nadkarni V. In Situ Simulation: Challenges and Results. Henriksen K, Battles JB, Keyes MA, Grady ML, editors. *Advances in patient safety: New directions and alternative approaches*. Vol. 3. Performance and Tools. AHRQ Publication No. 08-0034-3. Rockville, MD: Agency for Healthcare Research and Quality; August 2008.

Henricksen, K, **Patterson, M**. Simulation in Healthcare: Setting Realistic Expectations. *Journal of Patient Safety* 3(3):127-134, September, 2007

Johnson, L, **Patterson, M**, Simulation Education in Emergency Medical Services for Children. *Clinical Pediatric Emergency Medicine* 7 (2): 121-127 June, 2006

Patterson MD, Boening DA, Klein, BL, Fuchs, Smith KM, Hegenbarth MA, Carlson DW, Krug SE, Harris EM. The use of high dose epinephrine for patients with out-of- hospital cardiopulmonary arrest refractory to prehospital interventions. *Pediatric Emergency Care*. 21(4):227-237, April 2005

Hariharan S, **Patterson M**. A review of pediatric resuscitation pharmacology. *Clinical Pediatric Emergency Medicine*. 2001; 2: 124-128.

Patterson MD, Pediatric resuscitation Update, in *Pediatric Clinics of North America*. 1999; 46: 1285-1303.

Freeman BD, Correa R, Karzai W, Natanson C, **Patterson M**, Banks S, Danner RL, Wilson L, Eichacker PQ. Controlled Trials of rG-CSF and CD11b Directed Mab during Hyperoxia and E. coli Pneumonia in Rats. *Journal of Applied Physiology* 1996 Jun; 80(6): 2066-76.

Wright JL, **Patterson MD**. Resuscitating the Pediatric Patient, in *Emergency Medicine Clinics of North America* 1996;14: 219-231.

Klein BL, **Patterson M**. Observation Units in Pediatric Emergency Departments in Emergency Medicine Clinics of North America 1991;9: 669-676.

Letters to the Editor

Mehta H, **Patterson M**, Gravenstein N. Barrier enclosure using a Mayo stand and plastic sheet during cardiopulmonary resuscitation in patients and its effect on reducing visible aerosol dispersion on healthcare workers. Journal of Critical Care. Letter to the Editor. Accepted for publication May 2020.

Chapters

Fernandez R, Perry SJ, **Patterson M**. Anatomy of a Successful Grant Proposal in Nestel D, Hui J, Kunkler K, Scerbo M and Calhoun A editors in Healthcare Simulation Research; A Practical Guide. Springer Nature Switzerland, Cham, Switzerland. ISBN 978-030-26836-7. 2019

Patterson M, Dieckmann, P, Deutsch E. Simulation: A tool to detect and study boundaries in Braithwaite J, Hollnagel E, Hunte G editors in Working Across Boundaries: Resilient Health Care, Volume 5. Taylor and Francis Group, Boca Raton FL. ISBN-13: 978-0367224592. 2019.

Deutsch E, Fairbanks R, **Patterson M**. Simulation as a tool to study systems and enhance resilience in Hollnagel E, Braithwaite J and Wears R editors in Delivering Resilient Health Care. Taylor and Francis Group. Boca Raton FL, ISBN-13: 978-1138602250. 2018.

Patterson M, Deutsch ES, Jacobson L. Simulation: Closing the gap between Work-As-Imagined and Work-As-Done in Hollnagel E, Braithwaite J and Wears R editors in Resilient Healthcare Volume 3: Reconciling Work-As-Imagined And Work-As-Done. CRC Press, Taylor and Francis Group. Boca Raton, FL. 2016.

Auerbach M, **Patterson M**, Stone K. The Role of Simulation in Improving Pediatric Patient Safety in Cheng A and Grant V editors: Comprehensive Healthcare Simulation: Pediatric Edition. Springer 2016.

Patterson M. Simulation in Underresourced Countries in Palaganas JC, Maxworthy J, Epps C, Mancini MB: editors: Defining Excellence in Simulation. Walters Kluwer, 2014.

Dekker S Loprieto J, **Patterson M**, Spain A. Certification of Educators and Accreditation of Centers in Jeffries PR editor: Clinical Simulations in Nursing Education: Advanced Concepts, Trends, and Opportunities, Lippincott, Williams & Wilkins, 2013

Patterson, M. Vozenilek, J. Emergency Medicine in Riley, RH editor: A Manual of Simulation in Healthcare, Oxford, UK, Oxford University Press, 2008 second edition 2015

Ruddy RM, **Patterson MD.** Chest Pain in Fleisher GR et al, editors: Textbook of Pediatric Emergency Medicine, Baltimore, Williams and Wilkins, Fifth Edition, 2005

Ruddy RM, **Patterson MD.** Chest Pain in Fleisher GR et al, editors: Textbook of Pediatric Emergency Medicine, Baltimore, Williams and Wilkins, Fourth Edition, 1999.

Ruddy RM, **Patterson MD.** Chest Pain in Fleisher GR et al, editors: Textbook of Pediatric Emergency Medicine, Baltimore, Williams and Wilkins, Fourth Edition, 1999.

Patterson, M. Pediatric Resuscitation in Howell JM et al, editors, Emergency Medicine: Orlando, FL, W.B. Saunders Company, 1998.

Patterson, M. Cardiopulmonary Arrest in Orenstein JB et al, editors, PEDISTAT-CD ROM: Portland, OR, CMC Research 1998

Patterson, M. Blunt Abdominal Trauma in Orenstein JB et al, editors, PEDISTAT-CD ROM: Portland, OR, CMC Research 1998

Patterson, M. Vomiting in Barkin, R.M. et al, editors: Pediatric Emergency Medicine: Concepts and Clinical Practice, St. Louis, Mosby-Yearbook, 1992. Second edition, 1996.

Patterson, M. Hepatitis in Barkin, R.M. et al, editors: Pediatric Emergency Medicine: Concepts and Clinical Practice, St Louis, Mosby-Yearbook, 1992. Second edition 1996.

Abstracts (Previous 5 years only; complete listing available on request)

Kahlenberg L, Watson L, **Patterson M,** Wachsberger D et al. Implementation of a Procedural Sedation Safety Checklist, Poster Presentation, Society of Academic Emergency Medicine. May 13-17, 2014, Dallas, TX

Patterson, MD, Militello LG, Taylor R, Bungler A, Wheeler D, Klein G, Geis GL. Acceleration to Expertise in Healthcare: Leverage the critical decision method and simulation-based training. Poster Presentation, The Eleventh Annual Naturalistic Decision Making Conference, May 21-24, 2013 Marseille, France,

Watson L, **Patterson M**, Gothard D, Tirodker U. Testing a Sedation Checklist Usability Using Simulation. Platform Presentation. 2013 Society for Pediatric Sedation Conference. May 20, 2013. Houston, TX.

Grants –Active

SaFE CARE Simulation for Effective COVID Assessment and Response. Fernandez: PI, Patterson: Co_I.. University of Florida Self-Insurance W Martin Smith Interdisciplinary Grant. July 2020-June 2022

Akali E, Fernandez R, Lok B, Peek C, Patterson M, Mapping the Human-Technology Frontier to Improve Trauma Care: A Transdisciplinary Approach to Identify Opportunities, Challenges, and Risks-NSF 2026518. To begin Jan 2021.

Patterson M, Fahy B, Holland C, Conely J, Larson A, LeMaster T, Jenkins P, Fernandez R. Deploying In Situ Simulation to Identify Safety Threats and Improve Teamwork. Martin Smith Patient Safety Grant. University Of Florida Self-Insurance. July 1, 2019-June 30, 2021.

Completed

ACGME Clinical Learning Environments Pursuing Excellence: Mind the Gap: Creating a Culture and Climate of Safety. Ottolini M, Newman K, Patterson M. Co-PI. 4 years funding from ACGME. Sept 2016-Sept 2020, (0.2 FTE)

Christianson M, Waller M, Patterson M. Co-Investigator, Government of Canada Social Sciences and Humanities Research Council. The emergence and updating of shared understanding in teams during unexpected events: Medical simulation lab study. (Agency: SSHRC Insight GrantFund #: 498377) 2015-2018

Katznelson J, Auerbach, Stevens M, Tolleson-Rinehart S, Mills W, Patterson M. Co-I, Improving Rural Pediatric Emergency Care Through Tele-Simulation. AHRQ Sep1, 2016-6/30/2019.(Award number AHRQ 1 R18 HS024220-01A1 , 0.1 FTE)

Horwitz, L. PI. Auerbach, M and Chaudhry S: co-PI's. **Patterson M.**: consultant. Yale Center for Healthcare Innovation, Redesign and Learning (CHIRAL). P30 awarded 4 years funding from AHRQ. Sept 2014. (Award Number 1 P30 HS023554-01)

Geis, G. PI. Wheeler D, Klein G, Patterson M- co-investigators. Acceleration to Expertise: Simulation as a Tool to Improve the Recognition of Sepsis, R18 awarded by AHRQ Funded April 2011-March 2015 (Award number 1R18HS020455-01) Grant originally awarded to Mary

Patterson as PI. When Mary Patterson moved to Akron Children's, Gary Geis assumed PI Role at Akron Children's and Mary Patterson took Co-Investigator Role

In Situ Teamwork Training and Detection of Safety Threats in High Risk Settings. AHRQ, October 1, 2006 to Sept 30, 2008. Research related and peer reviewed (Award number U18 HS16615-01: Principal Investigator

Implementation of a simulation based patient safety curriculum in a pediatric emergency department. AHRQ, July 1, 2005 to June 30, 2007 Research related and peer reviewed. (Award number U18 HS015841-01: Principal Investigator

Effect of a focused Paramedic educational intervention on the acquisition and retention of airway management skills in the pediatric trauma patient. Ohio Emergency Medical Services/Trauma Research Grant. July 1 2003-June 30 2004. (research related peer reviewed)

The Use of High Dose Epinephrine in Pediatric Cardiopulmonary Arrest. American Heart Association Nation's Capital Affiliate Grant-in-Aid, 1991-1993, \$20,000. (research related, peer reviewed) Principal investigator of multi-center prospective collaborative interventional study.

Board of Directors

International Pediatric Simulation Society	2015-2019
Mid-Continent Regional Center for Health Care Simulation, Wichita, KS	2012-2017
National Center for Collaboration in Medical Modeling and Simulation, Board of Advisors, Norfolk, VA	2012-2014
Society of Simulation in Healthcare	2007-2011

Editorial Board

Journal of Simulation in Healthcare	2005-2007
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Reviewer

BMJ Quality and Safety in Health Care
BMJ Innovations
Simulation in Health Care
Joint Commission Journal of Quality and Patient Safety
Human Factors and Ergonomics

Studia Psychologica
Pediatric Emergency Care
Annals of Emergency Medicine
Journal of Pediatrics
Pediatric Quality and Safety
Journal of Patient Safety

Visiting Professor

Department of Anesthesia, Northwestern University, Feinberg Memorial School of Medicine
Visiting Professorship. Sept 15-16, 2016

John Wade Visiting Professorship in Patient Safety and Simulation-based Medical Education.
Hospital for Sick Kids. Toronto, CA. March 29-April 1, 2016

Department of Pediatrics Grand Rounds Visiting Professorship Award, Children's Hospital of
Colorado Jan 7-8, 2016.

Visiting Professor of Simulation, Mayo Clinic; Rochester, MN. July 15-16, 2010

National / International Distinguished Activities

(Previous nine years only: complete listing available on request)

Patterson, M. Improvisation in the face of COVID 19. Resilient Health Care Society (RHC)
Inaugural Statutory Meeting and Webinar. Aug 12, 2020. International

Patterson, M. Challenges to Normalizing Healthcare Simulation. Keynote speaker. The
Thirteenth Annual Modeling And Simulation Congressional Caucus Leadership Summit,
Sponsored By The National Training And Simulation Association (NTSA) Jacksonville, Florida,
February 24, 2020.

Deutsch E, **Patterson M**, Bajaj K, Su L, Allan C, Moga MA. Building Resilience with Simulation:
Practical Approach to a Better System. International Meeting of Simulation in Healthcare. Jan
22,2020. San Diego, CA

Walker K, Bajaj K, Campbell-Taylor K, deRoche A, Meguerdichian M, **Patterson M**. What
Simulation Change Agents Can Learn from Lady Gaga. International Meeting of Simulation in
Healthcare. Jan 21,2020. San Diego, CA

Curran I, **Patterson M**. Seropian M. Help Learners Succeed: Identify Instructional Gaps.
International Meeting of Simulation in Healthcare. Jan 20,2020. San Diego, CA

Seropian M, **Patterson M**. Simulation Program Development and Sustainability: Plan for Success. International Meeting of Simulation in Healthcare. Jan 18, 2020. San Diego, CA

Patterson M, Deutsch E. Simulation as a Tool to Assess Margin. The 8th Resilient Health Care Net Meeting. August 26-28, 2019. Awaji, Japan

Patterson M. Resilient Healthcare: The Remarkable Adaptations in Everyday Clinical Work The Resilient Health Care Conference. Aug 25, 2019. Awaji Japan

Garrow A, Abrams A, Nicholson, L, Yurasek G, Walsh H, **Patterson M**, Zaveri P. Bringing Safety Processes to the Frontline: Panel International Pediatric Simulation Symposia. May 21, 2019. Toronto, Canada.

Seropian M, LeMaster T, **Patterson M**, Developing a Simulation Program. Workshop, International Meeting of Simulation in Healthcare. January 26, 2019, San Antonio TX

Grant D, Deutsch E, **Patterson M**. System Improvement Strategies: Move from Micro to Macro using Resilience Engineering Concepts. International Meeting of Simulation in Healthcare. January 26, 2019. San Antonio, TX.

Seropian M, **Patterson M**, Curran I,. Help Learners Succeed: How to identify instructional gaps, International Meeting of Simulation in Healthcare. January 27, 2019

R Deutsch, E, Bajal, K, **Patterson M**. Resilience Engineering: Tackle the "Impossible". Panel Presentaton. International Meeting of Simulation in Healthcare, Jan 28, 2019, San Antonio, TX.

Theory to Practice: Issues and Challenges for Engineering Resilience- Invited Panelist, Nov 1-2, 2018. Mayo Clinic, Rochester, MN.

Deutsch E, **Patterson MD**. Surfacing Adaptive Capacity. Resilient Healthcare Network Meeting. August 14, 2018, Middelfart Denmark.

Zaveri P, Ren D, Banigan M, Batabyal R, Chamberlain J, Nicholson L, Sarnacki R, Walsh H, **Patterson M**, Code Response Simulation Training to Improve Interprofessional Communication and Safety Behaviors. International Pediatric and Perinatal Simulation Symposium. May 16, 2018. Amsterdam, Netherlands

Kessler D, Stone K, White M, Huang L, Reid J, Patterson M, Arnold J, Whitfill T. Stress Testing a New Construction or Process Using Simulation. International Pediatric and Perinatal Simulation Symposium. May 15, 2018. Amsterdam, Netherlands

Patterson M, Grant, D, Deutsch E, System Improvement Strategies: Moving from the Micro to the Macro. Preconference Workshop. International Pediatric and Perinatal Simulation Symposium. May 13, 2018. Amsterdam, Netherlands

Rivera J, Khunlerkit A, Cooks, A, Yin S, Howe J, Kellog K, **Patterson M**, Deutsch E, Keebler J, Lazzara E, Blickensderfer E, Looke T. RCA: HFE Practitioner's Journey from Individual Blame to System Fixes Panel. Human Factors and Ergonomics in Healthcare. March 27, 2018, Boston, MA

Patterson MD, Curran I, Seropian M. Identify Instructional Gaps: Help Learners Succeed. International Meeting of Simulation in Healthcare. January 17, 2018, Los Angeles, CA

Gross I, **Patterson MD**, Brown L, Abulebda K, Whitfill T, Auerbach M. Impact of ImPACTS: Measuring the impact of a simulation-based quality improvement program. International Meeting of Simulation in Healthcare. January 16, 2018. Los Angeles, CA

Patterson M, Deutsch E, Bajaj K. Using Simulation To Explore Resilience: An Innovative Approach To Patient Safety. International Meeting of Simulation in Healthcare. January 16, 2018. Los Angeles, CA

Patterson M, Deutsch E. Simulation: Next Steps. INSPIRE @IMSH. International Meeting of Simulation in Healthcare. January 13, 2018. Los Angeles, CA

Patterson M, Testing Your New Office Space For Latent Safety Threats. American Academy of Pediatrics National Conference. Sept 18, 2017, Chicago, IL

Patterson M., Deutsch E, Simulation to Support Margin of Maneuver. 6th Resilient Health Care Meeting. Aug 14, 2017, UBC, Vancouver, BC

Deutsch E, **Patterson M**. Safety II and Simulation; Overcoming Barriers to Implementation. International Pediatric and Perinatal Simulation Symposium. June 3, 2017 Boston MA,

Patterson M, Vozenilek J, Wears R. Panel discussion @ Catalyzing System Change though Healthcare Simulation: Systems, Competency, and Change. SAEM Consensus Conference. May 16, 2017. Orlando, FL

Patterson M, Deutsch E. Safety II, Simulation, and the Virtuous Spiral, Human Factors and Ergonomics in Healthcare, March 8, 2017, New Orleans, LA

Seropian M, **Patterson MD**. Identify Instructional Gaps: Help Learners Succeed. International Meeting of Simulation in Healthcare, Feb 1, 2017, Orlando, FL

Patterson M, Deutsch E, Fairbanks R. Using Simulation to Explore Resilience and Safety II. International Meeting of Simulation in Healthcare, Jan 31 2017, Orlando, FL

Biddell, E, Auerbach M, Emerson E, **Patterson M**. Latent Safety Threats: Systems for Mitigation through Systems Integration. International Meeting of Simulation in Healthcare, Jan 30 2017, Orlando, FL

Dieckmann P, Krage R, **Patterson M**. How to Put Modern Safety Approaches into Simulation Practice. International Meeting of Simulation in Healthcare, Jan 30 2017, Orlando, FL

Deutsch E. Fairbanks R, **Patterson MD**, Safety II: Actuated. Resilient Healthcare Network Meeting. Middelfart, Denmark, Aug 15-17, 2016

Su L, Deutsch E, **Patterson MD**, Mind the Gap: Team Training in Healthcare. Roundtable presentation at International Pediatric and Perinatal Simulation Symposium, May 9, 2016. Glasgow, Scotland

Parker SH, Su Lillian, **Patterson MD**. Mind the Gap: Team Training in Health Care, Human Factors and Ergonomics in Healthcare Symposium. April 16, 2016. San Diego, CA

Seropian M, **Patterson MD**. Identify Instructional Gaps: Help Learners Succeed. International Meeting of Simulation in Healthcare, Jan 18, 2016, San Diego, CA

Deutsch E, **Patterson M**, Fairbanks R. Simulation and Resilience: Tackle Patient Safety in a Different Way. International Meeting of Simulation in Healthcare, Jan 18, 2016, San Diego, CA

Stone K, Auerbach M, Reid J, **Patterson MD**. Maximize the Impact of Simulation on Patient Safety through Systems Integration. International Meeting of Simulation in Healthcare, Jan 19, 2016, San Diego, CA

White ML, Arnold J, Reid J, Auerbach M, **Patterson MD**. Stress the Space: Simulation for New Process or Space Testing. . International Meeting of Simulation in Healthcare, Jan 19, 2016, San Diego, CA

Bajaj K, Deutsch E, DeVita M, **Patterson MD**, Raemer D. In-Situ Simulation: Tool for Diagnosis and Management of Latent Error International Meeting of Simulation in Healthcare, Jan 20, 2016, San Diego, CA

Global Network of Simulation in Healthcare. White Paper Writing Group Simulation: Value on Investment. Dec 5-9, 2015. Sarasota, FL

Deutsch E, **Patterson M**, Fairbanks R. Simulation and Resilience Redux. Resilient Healthcare Network Meeting. Aug 11-13, 2015. Manly Australia

Parker S, Fernandez R, Su L, Grand J, Waller M, **Patterson M**. Leadership and decision making in adaptive action teams: Theory , research and practice. Interdisciplinary Network for Group Research. Pittsburgh, PA. July 25, 2015

Stone K, Auerbach M, MD, **Patterson M**, Reid J, Geis, G. Maximizing The Impact Of Simulation On Patient Safety Through Systems Integration. International Pediatric Simulation Society Meeting. Vancouver, BC. May 6, 2015

Kessler D, Amorese A, Arnold JL, Auerbach M, Huang L, **Patterson M**, Rosenbloom,E, Stone, K. Reid J, White ML. Stress the System, Test the Space! International Pediatric Simulation Society Meeting. Vancouver, BC. May 4, 2015

Patterson MD. Simulation to Improve Performance and Reduce Patient Harm. (invited presentation) National Patient Safety Foundation. Austin, TX. April 29, 2015

Wright MC, Segall N, **Patterson MD**, Kobayashi L, Barbeito A, Holtschneider M. In Situ Simulations for Identifying Latent Safety Threats, Training, and Measuring Performance: "Can they be Too Real?" and Other Innovations and Challenges. Human Factors and Ergonomics in Healthcare Meeting. Poster Presentation. Baltimore, MD. April 27, 2015,

Deutsch E, Jacobson L, **Patterson M**. Simulation and Resilience: Tackling Patient Safety in a New Way. International Meeting of Simulation in Healthcare, New Orleans, LA. Jan 12, 2015

Kessler D, Amorese A, Arnold JL, Auerbach M, Huang L, **Patterson M**, Rosenbloom,E, Stone, K. Stress the System, Test the Space! International Meeting of Simulation in Healthcare. New Orleans, LA. Jan 12, 2015.

Birnbaum AJ, Bajaj K, Walker K, Devita M, Deutsch E, **Patterson M**, Raemer D. In-situ Simulation: A Tool for Diagnosis and Management of Latent Error International Meeting of Simulation in Healthcare. New Orleans, LA. Jan 13, 2015.

Deutsch E, **Patterson M**, Wears R. Using Healthcare Simulation to Explore Resilience: a Novel Approach to Patient Safety. Resilient Health Care Net 2014. Middlefart, Denmark, August 13, 2014.

Kessler D, **Patterson MD**, Geis, G, Norman D, Middleton K, Rosenbloom E, Huang L, Look Before You Leap: Sim for New Spaces Part 2. International Meeting of Simulation in Healthcare. San Francisco, CA, Jan 26, 2014

Patterson MD, Fairbanks Rollin, Jacobsen L, Deutsch E. Simulation and Resilience: Tackling Patient Safety in a Different Way. International Meeting of Simulation in Healthcare. San Francisco, CA, Jan 28, 2014

Patterson MD, Improving Patient Safety During Resuscitation, National Pediatric Emergency Medicine Safety Curriculum. (One of several online video patient safety presentations required for all PEM fellows.) October 2013

Patterson MD. Myth vs Truth; the Evidence for Simulation. American Academy of Pediatrics National Exhibition. Transport Section. Orlando, FL, Oct 27, 2013

Patterson MD , Militello LG, Taylor R, Bungler A, Wheeler D, Klein G, Geis GL. Acceleration to Expertise in Healthcare: Leveraging the critical decision method and simulation-based training. Poster Presentation, The Eleventh Annual Naturalistic Decision Making Conference, Marseille, France, May 21-24, 2013

Kessler D. Reid J, Stone K, Nadkarni V, **Patterson M**, Auerbach M,, White M, Geis G, Manos J, Arnold J Look Before You Leap! Using Simulation to Prepare for a New Clinical Space or Process. International Meeting of Simulation in Healthcare. Jan 27, 2013, Orlando, FL

Moshe Feldman, PhD, MS (Moderator) Kimberly Stone, MD, MS, MA, Jennifer Reid, MD, **Mary Patterson MD, MEd**; William Riley, PhD, Ellen Brock MD, MPH. Utilizing In-Situ Simulation for Quality Improvement: Methods and Approaches for Healthcare Organizations, Expert Panel International Meeting of Simulation in Healthcare. Jan 28, 2013, Orlando, FL.

Patterson MD, Nagy K, Vandersall B, Mannequin Based In Situ Simulation To Identify Workflow And Patient Safety Threats Prior To Electronic Health Care Record (EHR) Implementation In A

Healthcare Organization (HCO.) International Meeting of Simulation in Healthcare. Jan 28, 2013, Orlando, FL.

Co-organizer and moderator of first **SSH Research Consensus Summit** held at IMSH. Critical review of evidence for current state of Simulation Research by expert panels and identification of gaps in simulation research. Conducted in NIH style format on 10 focus areas. Jan 21 and 22, 2011 New Orleans, LA,

Patterson M. In-Situ Simulation, Systems Testing and Team Training. Qatar Health 2010 International Healthcare Congress and Exhibition, 10-15 December 2010, Doha, Qatar

Patterson, M. Simulation Delivery Modes and System Improvements: Keynote address, Third Annual International Pediatric Simulation Symposium and Workshop. September 29-30, 2010. Madrid, Spain

Patterson, M. Society of Simulation in Healthcare Accreditation of Simulation Centers and Instructor Certification Programs: Invited address. SimTecT Health 2010. August 31-September 2, 2010. Melbourne, Australia

Curran I, Dieckmann P, Flanagan, B, Leighton, K, **Patterson M**, Seropian M. **Organizers, conveners and founders of the Global Network for Simulation:** International Simulation Leadership Summit - Aug. 4-6th, 2010, The Deanery, London, UK

Patterson M. Chair, Patient Safety track, 14th Annual Society of European Simulation and Medicine (SESAM) Meeting. June 15-18, 2010. Groningen, Netherlands.

Patterson, M. IMSH 10th Anniversary Meeting: At the Threshold of A New Frontier: Presidential Address, International Meeting of Simulation in Healthcare, Jan 25, 2010, Phoenix, AZ

Patterson M. Creating Safety Through Simulation: Keynote Address, 1st European Latin American on Healthcare Simulation and Patient Safety: SESAM-ALASIC Winter Retreat. November 13, 2009. Coimbra, Portugal

Regional Conferences (Previous five years only)

Patterson M, Human Factors in System Design and Its Impact on Patient Safety. 2018 National Pediatric Emergency Medicine Fellows Conference. February 25, 2018, Arlington, VA

Patterson M. Resilience and Precarious Success: -How Human Adaptation Keeps Patients Safe. Children's National Medical Center. March 2, 2016. Washington, DC

Patterson M. Simulation: A Patient Safety Method. Georgetown University Department of Pediatrics Grand Rounds. Oct 3, 2014. Washington, DC

Patterson M. Simulation a Patient Safety Method. The Michael Altieri Memorial Lecture. Inova Children's Hospital. May 22, 2014, Fairfax, VA

Patterson, M: Be Safe; Be Aware. Pediatricians DOing Education Together : A Joint CME Conference of the American College of Osteopathic Pediatricians (ACOP) and the American Academy of Pediatrics Section on Osteopathic Pediatricians. Invited Speaker. April 26, 2013, Columbus, OH

Patterson, M. Simulation: Training and Patient Safety. American College of Osteopathic Physicians Conference, San Diego, CA . Oct 9, 2012

Patterson, M. Expert Panel: Modeling and Simulation in Healthcare
Modeling and Simulation Multi-Con. Virginia Modeling Analysis and Simulation Center. Suffolk, VA. Sept 25, 2012

Patterson, M. Simulation as a Tool for Patient Safety, Grand Rounds, Akron Children's Hospital. Nov 11, 2011

Patterson M. Simulation for the Evaluation of System Competence. Keynote Speaker
Creating a Culture of Change, Sept 19-20, 2011. Omni Netherlands Hotel, Cincinnati, Ohio

Patterson, M. Simulation: Current State and Future Directions. Invited Speaker: Grand Opening of the Hannaford Center for Safety, Innovation, and Simulation. Maine Medical Center, Portland, Maine. October 5, 2010

Patterson, M. Simulation as a Strategy to Improve Patient Safety 2010 Pediatric Emergency Medicine Leadership Conference San Antonio, Texas, April 16-18, 2010.

Patterson, M. Creating Patient Safety Through Simulation, Penn State: MS Hershey Medical Center Simulation Center Grand Opening. Hershey, PA Jan 20, 2010