**Curriculum Vitae**

Jason Wayne Custer, M.D.

Associate Professor, Department of Pediatrics

University of Maryland School of Medicine

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**Contact Information**

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**Education**

1995-1999 **Bachelor of Science in Engineering**

Duke University, School of Engineering (Manga Cum Laude)

Bachelor of Science in Engineering in Biomedical Engineering

Bachelor of Science in Engineering in Electrical Engineering

Philosophy Minor

1999-2003 **Doctorate of Medicine**

University of Maryland School of Medicine (Cum Laude)

2018 – 2019 P**hysician Leadership Fellowship – University of Maryland Medical System**

American Association of Physician Leadership

15-month course consisting of didactic sessions, coaching and system level team project

2020 - present **Certified Physician Executive** – American Association of Physician Leadership

Expected Completion December 2022

**Post Graduate Training**

2003-2006 Residency – Pediatrics**,** Johns Hopkins Hospital

2006-2010 Fellowship, Pediatric Critical Care Medicine, Johns Hopkins Hospital

2007-2008Chief Residency – Pediatrics**,** Johns Hopkins Hospital

2009-2010 Chief Education Fellow, Johns Hopkins Hospital

**Certification**

2006 – present American Board of Pediatrics – General Pediatrics

2010 – presentAmerican Board of Pediatrics – Pediatric Critical Care Medicine

**Licensure**

2007 – present Maryland Board of Physicians (active)

**Employment History**

**Academic Appointments**

2010 – 2017 Assistant Professor, Department of Pediatrics, University of Maryland School of Medicine

2017 – present Associate Professor, Department of Pediatrics, University of Maryland School of Medicine

**Other Employment**

2007 – 2010 Attending Physician, Pediatric Emergency Department, Johns Hopkins Hospital

2016 – 2019 Attending Physician, Pediatrics, St Joseph’s Medical Center

**Professional Society Memberships:**

1999 – present American Academy of Pediatrics, Member

Section on Critical Care

2008 – 2012 American Thoracic Society, Member

2008 – 2019 Society of Critical Care Medicine, Member

2009 – 2013 Society for Diagnostic Errors in Medicine, Member

**Honors and Awards**

1995-1999Maryland State Police Scholarship,

1998 Tau Beta Pi Engineering National Honor Society – elected member of Duke University Chapter

1998 Golden Key National Honor Society – elected member of Duke University Chapter

1999 Engineering School Student Service Award

1999 Duke University School of Engineering Student Body President

2002 Alpha Omega Alpha Medical Honor Society Member (AOA) –

2008 Department of Pediatrics - Resident Appreciation Award

2009 National Institutes of Health – Loan Repayment Program Recipient

2009 American Thoracic Society Fellow Travel Award Recipient

2010 Teaching attending of the month, October 2010

2011 PICU Nursing Friend of the Month

2011-2012 Alexander Shaffer Award - Department of Pediatrics Teaching Award

2013 Washington Post Magazine SuperDocs Rising Star, Pediatric Critical Care

2013-2014; Baltimore Magazine Top Doctor

2016-2021 Pediatric Critical Care

2013-2014 Alexander Shaffer Award - Department of Pediatrics Teaching Award

2014 -present Health Professional Educators Summer Symposium – Elected Member, Fairlee, VT - Dartmouth University, University of Missouri

2015 Chief Nursing Officer Unit Teamwork Award

2015 Nurse-Physician Collaborator Award – University of Maryland

2017 Nurse-Physician Collaborator Award (Nominee) – University of Maryland

2022 Innovations Grant- University of Maryland Medical Center

Safe Bedside Procedural Practices, $12,000 project award

**Clinical Activities**

**Clinical expertise**

Board certified in Pediatrics and Pediatric Critical Care Medicine

Additional Clinical Practice in Academic Pediatric Emergency Departments

Research expertise in medical decision making, diagnostic errors and ICU outcomes

Leading Patient safety and Quality Improvement Initiatives

Expert in Root Cause analysis, Just Culture and Team dynamics

Completed University of Maryland Physician Leadership Fellowship and actively pursuing a Certified Physician Executive Certification

**Scope of Clinical Practice**

2007 – 2010 Pediatric Emergency Medicine - Johns Hopkins Medical Center

2008 General Pediatric Ward Attending - Johns Hopkins Medical Center

Led a team of residents and medical students on a general in-patient pediatric ward

2010 – 2013 General Pediatric Inpatient Attending - University of Maryland Medical Center

Led a team of resident and medical student on a general in-patient pediatric ward

Two Clinical week per year

2010 – present Pediatric Critical Care Attending - University of Maryland Medical Center

15-20 clinical service weeks per year with additional 35-50 overnight in house shifts

90% cFTE 2010-10/2018; 50% cFTE 10/2018-present

Pediatric ICU expanded from 10 beds to 19 beds

Developed pediatric cardiac critical care service line

Mixed unit with general ICU and cardiac ICU including transplant, oncology, ventricular assist device, ECMO and other subspecialty care

Supervision of residents, fellows and Advanced practice providers

2015 – 2019 Pediatric Emergency Medicine - University of Maryland Medical Center

**Development of Clinical Programs**

2011 Pediatric Extracorporeal Membranous Oxygenation

Planning Committee to design and implement the introduction of this technology to the University of Maryland Children’s Hospital

2012 Pediatric Cardiovascular Critical Care Service

Designed and implemented a two-team model of care that focused on the care of the post operative cardiac surgery patient

2014 Pediatric Rapid Response Team

Designed and implemented a trigger tool to activate rapid responses in the Children’s Hospital to prevent deterioration using Pediatric Early Warning Scores

2014 Department of Pediatrics Safety Rounds

Created monthly multi-disciplinary rounding team to discuss safety hazards with front line providers

2015 Pediatric Sedation Service

Assisted with design and implementation of a pediatric sedation service

2017 Pediatric Vascular Access team

Assisted with design and implementation a nursing led vascular access team to place pediatric PICC line and extended dwell peripheral IV.

2017Improving Pediatric Sepsis Outcomes

Physician Lead for a Multi-institutional collaborative through the Children’s Hospital Association. Designed and implemented sepsis screening, huddles and treatment algorithms for the University of Maryland Children’s Hospital

2017 Root Causes Analysis for Hospital Acquired Infection in Intensive Care Units

Led root cause analysis for all HAI in 12 ICUs throughout the University of Maryland Medical Center

2018 Pediatric ICU Family Tele-rounding.

Developed a program for families unable to be present at the bedside to join the PICU rounding team on rounds via hand held devices

**Administrative Service**

**Institutional Service**

Johns Hopkins

2004 – 2008 Member, Pediatric Residency Review Committee

2006 – 2010 Member, Pediatric Intern Selection Committee, Johns Hopkins Pediatrics

2007 – 2008 Chief Resident – Department of Pediatrics

2007 – 2008 Member, Physician Order Entry (POE) I-team for Pediatrics

2007 – 2008 Member, Pediatric Emergency Department (HMED) Committee

2007 – 2008 Advisor, Department of Pediatric Morbidity and Mortality Committee

2007 - 2008 Member, Family as Faculty Committee

2008 Chair, Family Centered Rounds Committee

2009 – 2010 Chief Education Fellow – Department of Pediatric Critical Care

University of Maryland Medical Center

2010 – 2014Assistant Director of Inpatient services – University of Maryland Hospital for Children

2010 – present Faculty interviewer – Pediatric resident selection, University of Maryland

2010 - present Leader, Weekly pediatric intensive care quality improvement/Morbidity and Mortality conference, PICU Operations

2010 – present Member, Critical Care Operations Committee, University of Maryland

2011 – present Medical Director Pediatric Intensive Care Unit, University of Maryland

Directed the opening of a new 19 bed pediatric ICU – September 2013

2011 - 2018Member, Pediatric Intern Selection Committee, University of Maryland

2011 - 2020 Chair and coordinator, Department of Pediatrics Morbidity and Mortality Grand Rounds

2012 - present Co-chair, Pediatric Quality Improvement Committee

2012 - 2018 Physician representative - Pediatric ICU Unplanned events committee

2013 - present Pediatric ECMO Counsel

2014 - 2016 Member - Transfusion Practice Committee

2014 - 2018 Member – GME Patient safety and quality improvement sub-committee

2015 - present Member – Patient Safety and Risk Mitigation Committee

2015 - 2017 Physician Champion - Department of Pediatrics – Epic/Portfolio

Implementation of EMR documentation and order set management

2016 - 2018 Physician Member – Council for Hospital and Ambulatory Patient Safety

2017 - present Member – Performance Improvement Steering Committee

2017 - present Member – IT Advisory Committee

2017 - 2019 Leader – Root Causes Analysis for Intensive Care Unit Hospital Acquired Infections

2018 – present Director of Patient Safety – University of Maryland Medical Center – 50% FTE support

1. – present Lead Instructor – Just Culture for Leaders

Trained >1500 leaders in Just Culture – 3 hour workshop

2019 - presentACGME –Integrating Safety into Daily work **–** taskforce, national collaborative

2020 - presentCo-chair -HRO steering committee

2020 - 2021Workplace Violence Committee – Data and Metrics Sub-committee co-chair

2020 - 2021 Co-Incident Commander – UMMC Incident Command – COVID-19 Response

Responsible for the UMMC response to the COVID-19 Pandemic

Led a team of 70 leaders through the pandemic response between November 2020 – June 2021

2021 - present Co-Chair - UMMS Clinical Vaccine Workgroup

Led UMMS system wide approach to vaccine clinical considerations

2021 Joint Commission Rapid Prep Team Member

1. Physician Escort – Joint Commission Accreditation visit 2021
2. - 2022 Co-Commander – UMMC Incident Command – Covid-19

Co-Led a team of 70 leaders through the pandemic response between September 2021-December 2021

2021 – 2022 Incident Commander December 2021-March 2022

Led a tram of 70 leaders through pandemic response

2021 – 2022 UMMS Pediatric Planning and Operations Section Chief

Led UMMS System level pediatric response to COVID-19 pandemic

**Local and National Service**

2000 Convener and Chair, American Medical Student Association (AMSA) Regional Conference

2012-2014 Co-chair – Committee for inpatient pediatrics, Maryland Chapter of the AAP

2012 - present Abstract reviewer – American Academy of Pediatrics Section of Critical Care

1. - 2018 Critical Care representative - State of Maryland Pediatric

Emergency Medical Advisory Committee

1. Manuscript Reviewer – *American Thoracic Society* (1/yr)

2013Manuscript Reviewer *- World Journal of Pediatrics*(1/yr)

2014 – 2017 Member – Alliance Kids Advisory Group – State Wide Pediatric Hospice Program

2015 Invited Participant – Maryland Summit on the Future of Graduate Medical Education. Baltimore, MD.

2015 – 2020Manuscript Reviewer *- Pediatrics* (1/yr)

2016Manuscript Reviewer *- Pediatric Research* (1/yr)

2016-2021Manuscript Reviewer *- European Journal of Pediatrics*(1/yr)

2018Manuscript Reviewer *– Diagnosis* (1/yr)

**Community Service**

2013 – 2017Volunteer medical staff – Maryland Special Olympics summer games

2013 Science Fair Judge – Mount Saint Joseph High School

2014 Senior Project Mentor – Mt. St. Joseph High School

2015 - 2018 Solutions Showcase Judge – Mt. St. Joseph High School

2107-present Maple Glen Homeowners’ Association President

2018 Coordinator – Leveling the Playing Field – used sports equipment drive

2015-present Coach – HOCO Lacrosse, Howard County Lacrosse Program

4-6 hours per week

2019-present Coach – Soccer Association of Columbia

2-3 hours per week

**Teaching Service**

**Educational Administration**

2007 – 2008 Chief Resident, Department of Pediatrics, Johns Hopkins Hospital

Provide direction, mentorship and education for the education of 85 residents and all medical student clerkship students in the department of Pediatrics

2009 - 2010 Chief Educational Fellow, Pediatric Critical Care Medicine, Johns Hopkins Hospital

2012 – 2019 Assistant Pediatric Residency Program Director

Semi-annual reviews for 8 pediatric residents

2015 Graduate Medical Education Patient Safety and Quality Improvement Subcommittee

**Curriculum Development**

2014 Pediatric Residency Curriculum – Design team

2014 Pediatric Hospital Based Practice Residency Pathway

Developed 2 year curriculum for pediatric residents to be used for the 2nd and 3rd year for residents interested in PICU, NICU, EM and hospitalist medicine

2014 Pediatric Procedural and Diagnostic Elective

2015 Medical communication and diagnosis – Pediatric Intern Orientation

2016 Pediatric Resident Resiliency Seminar

Full day seminar for 2nd year pediatric residents

Developed program and led session covering medical errors, difficult situations and coping mechanisms

20 Residents

2019 Just Culture for Leaders – assisted Rebekah Friedrich with content development

Trained over 1500 medical center leaders

2020 GME Roundtable – Medical Errors – Planning Committee

Virtual Round Table event with 20 faculty and 50 residents to discuss medical errors and resiliency

2020 GME UMMC Residency Wellness Retreat – Feb 2021 – Planning Committee

All residency program full day retreat focused on physician wellness, resiliency, joy in medicine

Didactic speaker (Institutional Approaches to Wellness and Resiliency) and Break-out group leader

150 Residents

**Institutional teaching activities**

1. - present Just Culture for Leaders Training Workshop

Physicians, Nurses, Allied Health Professionals from UMMC/UMMS

3 contact hours, 1500 participants

Instructor, Small Group leader, Content/curriculum development

1. - present Connecting Learners to Safety Event Reviews

Residents, Fellows from UMMC

200 participants, 1.5 contact hours

Instructor and Content Development

2020 GME Roundtable – Medical Errors

Residents, 50 participant, 2 contact hours

Planning Committee, Instructor

2020-2021 GME UMMC Residency Wellness Retreat

Residents, 150-200 participants

All residency program full day retreat focused on physician wellness, resiliency, joy in medicine

Planning Committee, Speaker, Small group leader

**Medical Student teaching activities**

2012 – 2018 Medical Student Pediatric Teaching Attending – 6 weeks medical students on pediatric clerkship

Observed History and Physical

Written History of Physical Review

Core content lectures – 3, 1.5 hour blocks

1 6 week block per year – 10-15 medical students

Contact hours – 6 - 10 hours per student

2013 – 2018 Medical Student Clerkship Case Conference

Unstructured case discussions with 18 medical students

Part of core curriculum for clerkship

Once per year

Contact hour – 1-2

**Resident teaching activities**

2006 – 2010 Editor - PICU Handbook for Pediatric Residents (Hopkins)

2007 – 2008 Noon conference curriculum organization for the Johns Hopkins Department of Pediatrics

4 hours weekly, 50 participants

2007 – 2008 Case Management Conference

Organized weekly conference for the Department of Pediatrics

1 hour weekly, 50 participants

2007 – 2008 Pediatric night team morning report

3 interns, 3 residents, 2 students

1 hour/day, 3 days per week

2007 – 2008 Pediatric Morning Report

8 residents

1 hour/day, 4 days per week

2007 – 2008 Chief Resident Rounds

8 interns, 8 students

1 hour/day, 3 days per week

2008 Senior Resident Teaching Retreat Leader

26 residents, 6 hours

2008 - 2009 Career Day Seminar Organizer and Participant

26 residents, 4 hours

2010 – 2014 PICU Daily Didactic – 3 days per week, approximately 30/year

4-5 pediatric residents, 1 4th year medical student, 1 3rd year medical student

2011 - present The evaluation and management of the pediatric airway – Pediatric Core Lecture Series

1 hour per year; 30 participants

2011 – present Organ System Failure – Pediatric Resident Core Lecture Series

1 hour per, 30 participants

2011 - present Hemodynamics/Shock – Pediatric Resident Core Lecture Series

1 hour per, 30 participants

2012 - present Author and Editor – PICU Handbook for Pediatric Residents

2013Respiratory Distress, Failure and Mechanical Ventilation – Pediatric Resident Conference

1 hour, 30 participants

2013 - present Small Group Leader – IPASS sign-out seminar

2 hours, 20 participants

2015 Combined Pediatric/Emergency Medicine Code Blue Grand Rounds

1 hour, 50 participants

2015 The diagnostic process and medical communication – Intern Orientation

1 hour, 20 participants

2015 - 2019Pediatric Intern Procedural Simulation

3 hours, 20 participants

2015 – present PICU didactic lecture series – Common Cardiac Lesions, Basic Approach to Sedation, Basic Approach to Mechanical Ventilation

1 hour per month, 4 participants

2016 – present Teamwork and Debriefing. PGY2 Retreat

30 minutes, 20 participants

2020 - present ACGME – Patient safety event review debriefing

2-4 per week

RCA for 1 hours, 15-30 minute debrief

2-10 participants per event

Approximately 150 learners to date

**Fellowship teaching activities**

2010 – 2014 ECMO basics

1 hour, 1-2 participants, yearly

2010 Fellow case conference – Thrombotic Thrombocytopenic Purpura

1 hour, 8 participants

2010 Journal Club – Evidence based approach to advanced asthma management

1 hour, 10 participants

2011 – 2014 Bi-weekly Fellow’s Case conference - organizer

2012 - present Fellow didactics

Mechanical Ventilation Basics

Advanced Hemodynamics and monitoring

1 hour didactics, 4-6 participants

2015 Research conference – Diagnosis and Diagnostic Error in Critically Ill Pediatric Patients

1 hour, 10 participants

2017 PICU Fellows Great Debate Mentor - Mentored fellows in debate prep

3 contact hours

**Nursing Teaching activities**

2010 – present Cardiac Core – Advanced Hemodynamic Monitoring

1 hour, 8-12 participants

2013 Sepsis and Shock – Pediatric Nursing Symposium

1 hour, 30-40 participants

2021 High Reliability Organization and Just Culture – Nurse Residency Program

1 hour, 20-30 participants

**Mentorship**

**Pediatric Critical Care Fellowship Mentorship**

2016 – 2018 Anita Saldanha - Scholarly Oversight Committee

2019 – 2021 Claudine Brown – Quality Improvement project mentor, Extubation Readiness

**Pediatric Residency Career and Research Mentorship**

2011 – 2012 Carolyn Wilhelm

Post-Residency - Cardiology fellowship, Nationwide Children’s Hospital

2011 – 2014 Christine Page-Lopez

Post-residency - Primary Care, Washington, DC

2011-2014 Nick Morin

Post-residency - Pediatric Critical Care Fellowship - Johns Hopkins

Mentored research project –Multi-center outcomes analysis of children with severe rhino/enteroviral respiratory infection. Pediatr Crit Care Med. 2015 Feb;16(2).

2011 – 2014 TJ Simons

Post-residency - Pediatric Emergency Medicine, Mercy Medical Center

2011 – 2014 Meredith Luckenbaugh

Post-residency - Primary Care Pediatrics, Beacon Pediatrics, Rehoboth Beach, Delaware

2011 – 2014 Kimberly Peace

Post-residency - Pediatric Psychiatry Fellowship – Children’s Hospital of Philadelphia

2012 – 2015 Hilal Abuzahra

Post-residency - Pediatric Hospitalist, CA

2012 – 2015 Theo Trigylidas

Post-residency - Pediatric Emergency Medicine Fellowship - St. Louis, MO.

2012 – 2015 Michael Weinreich

Post-residency - Allergy/Immunology Fellowship, National Institutes of Health

2013-2015 Hatai Kraushaar

Post-residency -Pediatric ICU Fellowship, University of Maryland

Mentored research project – Needs assessment, palliative care knowledge presented at resident research day, December 2014

2014 – 2016 Edem Binka

Post-residency - Pediatric Cardiology Fellowship, Johns Hopkins Hospital

2014 – 2016 Natalie Torres

Post-residency - Pediatric Critical Care Fellowship, AI DuPont Hospital

Mentored Research Project Extracorporeal Membrane Oxygenation (ECMO) for Neonates with Congenital Renal and Urologic Anomalies and Pulmonary Hypoplasia: A Review of the Extracorporeal Life Support Organization (ELSO) Registry. The 8th World Congress on Pediatric Intensive and Critical Care, June 2016, Toronto, CA.

2014 – 2016 Bethany Elliott

Post-residency - Hospitalist Baltimore Washington Medical Center

2014 – 2016 Alex Whitaker –

Post-residency - Pediatric hospitalist medicine, University of Maryland

Mentored Research Project – Respiratory Viral Illness and Metabolic Diseases, presented at Pediatric Resident Research Day, December 2015

2015 – 2017 Rahul Gupta

Mentored Quality Improvement Project – Nursing/Resident Communication

2015 – 2017 Melissa Oh

Mentored Quality Improvement Project – Resident sign-out improvement

2017 – 2019 Kevin Cesa

Mentored Quality Improvement Project – Nurse/Resident Communication

Won Pediatric Residency QI award

2018 – 2019 Anisa Lakhani –

Mentored Quality Improvement Project - Discharge Summary Quality Improvement

Won Pediatric Residency QI project award

2019 – 2021 Joe Riffe –

Mentored Longitudinal Research project – DxPICU, multiple abstracts at National Meetings

2021 – present Stefanie Fischell – Faculty Mentor

**Quality and Safety Trainee Mentorship**

2019Alissa Werzen – Quality Improvement elective

Mentored research project – Improving Sepsis Resuscitation on the Pediatric Wards

Presented at Grand Rounds

2020 – 2021 Alissa Werzen – GME Quality and Safety Chief Resident

Mentored Research project on Diagnostic Error

**Medical Student mentorship**

2013 – 2014 Michael Shorofsky

Pediatric Residency INOVA, Fairfax, VA.

Mentored Research Project – Literature Review of High Flow Nasal Cannula Utilization

2014 – 2015 Kristen Coletti

Pediatric Residency, Johns Hopkins Hospital

Mentored Research Project - Utilization of High Flow Nasal Cannula in a Pediatric Intensive Care Unit at a Tertiary Children's Hospital. Pediatric Academic Society, 2015 – San Diego, CA; Abstract #753604.

2016 – 2017 Angelina June

Mentored Research Project – Outcomes of Pediatric Patients with Sepsis and Septic Shock Requiring Extracorporeal Life Support; Abstracts submitted to SCCM 2016

2021 Ellen Moxley

Mentored Quality Improvement Project – Barriers to the use of Translator Services in Pediatrics

**Undergraduate Mentorship**

2014-15 Jordan Hampton; Flannery Loughran; Maeve McCoy; Tara Ruoff; Talia Sieff

University of Maryland Biomedical Engineering Capstone Project

Adjustable Arm for the Organization and Stabilization of Wires and Tubing

2017-2018 Uva Dayalan, Jake Gross, Thomas Mathews, Michael Reilly, Jessica Yau. University of Maryland Biomedical Engineering Capstone Project

Refining the Placement of Endotracheal Tubes with a Tracheal Distance Device

**Other mentorship**

2014 Tom Basil – High School Senior Project Mentor; Mount Saint Joseph High School

**Grant Support**

**Completed Grants**

9/2009 – 6/2011 *(PI) National Institutes of Health – Loan Repayment Program*

Defining team based cognitive workflow in pediatric intensive care using cognitive task analysis

Mentor: Geoff Rosenthal, MD, PhD

9/2019 – 10/21 (Co-investigator, Site PI) *DXPICU: Multi-institutional study on diagnostic error and diagnostic documentation in Pediatric Intensive Care*

University of Iowa Intramural Grant

**Publications**

**Peer reviewed journal articles**

1. [Easley R](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Blaine%20Easley%20R%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus)B, [Lancaster CT](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Lancaster%20CT%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Fuld MK](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Fuld%20MK%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [**Custer JW**](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Custer%20JW%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Hager DN](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Hager%20DN%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Kaczka DW](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Kaczka%20DW%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus), [Simon BA](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Simon%20BA%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_RVAbstractPlus). Total and regional lung volume changes during high-frequency oscillatory ventilation (HFOV) of the normal lung. [Respir Physiol Neurobio*l.*](javascript:AL_get(this,%20'jour',%20'Respir%20Physiol%20Neurobiol.');) 2008 Oct 18. 54-60; PMID 18996228. (*Performed data analysis, manuscript preparation)*

2. Easley RB, Mulreany DG, Lancaster CT, **Custer JW**, Fernandez-Bustamante A, Simon BA. The effect of pulmonary blood flow distribution on thermodilution extravascular lung water measurements in a model of acute lung injury. Anesthesiology 2009 Nov; 111 (5); 1065-74. PMID 19809280. (*Performed data analysis, manuscript preparation)*

3. **Custer JW**, Andaleeb A, Kaczka DW, Mulreany DG, Simon BA, Easley RB. In Vitro performance characteristics of the Sensormedics 3100A and B high frequency oscillatory ventilators. Pediatr Crit Care Med. 2011 Jul;12(4):e176-80. PMID: 21037502.

4. **Custer JW**, Watson CM, Dwyer J, Kacska DW, Simon BA, Easley RB. Critical evaluation of emergency stockpile ventilators in an in vitro model of pediatric lung injury. Pediatr Crit Care Med. 2011 Nov;12(6):e357-61. PMID: 21317679.

5. **Custer JW**, White E, Fackler JC, Xiao Y, Tien A, Lehmann H, Nichols DG. A qualitative study of expert and team cognition on complex patients in the pediatric intensive care unit. [Pediatr Crit Care Med.](http://www.ncbi.nlm.nih.gov/pubmed/21926662) Pediatr Crit Care Med. 2012 May;13(3):278-84. PMID: 21926662.

6. LevinSR, Harley E, Fackler JC, Lehmann CU, **Custer JW**, France D, Zeger SL. Real time forecasting of pediatric intensive care unit length of stay using computerized provider orders. Crit Care Med. 2012 Nov;40(11):3058-3064. PMID: 22824935. (*Provided clinical insight and assisted with model design)*

7. McCrory MC, Aboumatar H, **Custer JW**, Yang C, Hunt E. ""ABC-SBAR" Training Improves Simulated Critical Patient Hand-off by Pediatric Interns. Pediatr Emerg Care. 2012 Jun;28(6):538-438. PMID: 22653454. (*Performed data analysis and informed experimental design)*

8. Winters BD, **Custer J**, Galvagno SM, Colantuoni E, Kapoor SG, Lee H, Goodes V, Robinson K, Nakhasi A, Pronovost P, Newman-Toker DE. Diagnostic Errors in the Intensive Care Unit: A Systematic Review of Autopsy Studies. BMJ Qual Saf. 2012 Jul 24. 894-902. PMID: 22824935. *(Performed literature review, assisted with review design and manuscript submission)*

9. Spaeder MC; **Custer JW**; Bembea MM; Aganga DO; Song X; Scafidi S. A multi-center outcomes analysis of children with severe viral respiratory infection due to human metapneumovirus. Pediatr Crit Care Med. 2013 Mar;14(3):268-72. PMID: 23392374. (*Site PI for multi-site collaborative, initial project design and data analysis)*

10. Millstein L, Charnaya O, Hart J, Habicht R, Giudice E, **Custer J**, Lewin L. Implementation of a Educational Curriculum and Impact of Pediatrics Resident In-training examination scores. Journal of GME, June 2014. 377-8. PMID: 24949165 *(Assisted with implementation of the curriculum, data analysis and manuscript submission)*

11. **Custer JW**, Winters BD, Goode V, Robinson KA, Yang T, Pronovost PJ, Newman-Toker DE. Diagnostic error in the pediatric and neonatal intensive care unit: a systematic review. Pediatr Crit Care Med. 2015 Jan;16(1):29-36. PMID: 25329138.

12. Spaeder MC, **Custer JW**, Miles A, Ngo L, Morin N, Scafidi S, Bembea MM, Song X. A multi-center outcomes analysis of children with severe rhino/enteroviral respiratory infection. Pediatr Crit Care Med. 2015 Feb;16(2):119-23. PMID: 25647121. (*Site PI for multi-site collaborative, initial project design and data analysis)*

13. Tylka C, McCrory MC, Gertz SJ, Ajizian SJ, **Custer JW**, Spaeder MC. A Multicenter Outcomes Analysis of Immunocompromised Children with Severe Adenoviral Respiratory Infection. Critical Care Research and Practice, vol. 2016. PMID: 27242924. (*Site PI for multi-site collaborative and data analysis)*

14. Bagdure DN, **Custer JW**, Rao S, Messacar K, Dominguez S, Beam BW, Bhutta A. Hospitalized Children with Encephalitis in United States: A Pediatric Health Systems Database Study. Pediatr Neurol 2016 Aug;61:58-62. PMID: 27353693. (*Project design, data analysis, manuscript submission)*

15. Leone D, Zaner C, Cohee L, **Custer JW**. Case report of a 3 month old female with prolonged fever, pulmonary nodules, and a rare diagnosis of Infantile Takayasu Arteritis: A multidisciplinary collaboration. Matthews Journal of Pediatrics. 2016 M J Pedia. 1-8.

16. Simone S, Edwards S, Lardieri A, Walker LK, Graciano AL, Kishk OA, **Custer JW**. Implementation of an ICU Bundle: An Interprofessional Quality Improvement Project to Enhance Delirium Management and Monitor Delirium Prevalence in a Single PICU. Pediatr Crit Care Med. 2017 Jun;18(6):531-540. PMID: 28410275

17. Colletti KD, Bagdure DN, Walker LK, Remy KE, **Custer JW**. High Flow Nasal Cannula Utilization in Pediatric Critical Care. Respir Care. 2017 Aug;62(8):1023-1029. PMID:28588119

18. Remy KE, **Custer JW**, Cappell J, Foster CB, Garber NA, Walker LK, Simon L, Bagdure D. Pediatric Anti-N-Methyl-d-Aspartat Receptor Encephalitis: A Review with Pooled Analysis and Critical care Emphasis. Front Pediatr 2017 Nov 24;5:250. PMID: 29226117. *(Project design, data analysis)*

19. Millstein LS, Feigleman S, **Custer JW**, Giudice EL. Individualization of resident education through pathways and longitudinal experiences. Med Educ. 2019 May; 53(5): 506-7. PMID: 30924178. *(Project design, data analysis)*

20. Friedrich R, **Custer JW**. Final Word: designing for Medical Device Failure. Biomedical Instrumentation and Technology. Biomed Instrum Technol

2019 Nov./Dec.;53(6):470. PMID: 31765594

21. Howes C, Hiatt K, Turlington K, Foster C, Holloway A, Graciano A, **Custer J**, Bhutta A, Bagdure D. Botulism in the Pediatric Intensive Care Units in the United States: Interrogating a National Database. J Pediatr Intensive Care. 2020 Mar;9(1): 12-15. PMID: 31984151. *(Data analysis, manuscript preparation)*

22. Kudchadkar SR, Nelliot A, Awojoodu R, Vaidya D, Traube C, Walker T, Needham DM. Prevalence of Acute Rehabilitation for Kids in the PICU – PARK-PICU (**Custer JW**). Physical Rehabilitation in Criticall Ill Children: A Multicenter Point Prevalence Study in the United States. Crit Care Med. 2020 May;48(5):634-44. PMID 32168030. *(Site PI for national collaborative through PALISI network, data collection, data entry)*

23. Scott HF, Brilli RJ, Paul R, Macias CG, et al. Improving Pediatric Sepsis Collaborative Investigators **(Custer JW).** Evaluating Pediatric Sepsis Definitions Designed for Electronic Health Record Extraction and Multicenter Quality Improvement. Crit Care Med . 2020 Oct;48(10):e916-e926. PMID: **32931197 *(Site PI for national collaborative through Children’s Hospital Network, implemented quality improvement program, supervised data entry, process improvement and committee management)***

24. Lemkin DM, Stryckman B, Klein JE, **Custer JW**, Barre W, Maranda L, Wood KE, Paulson C, Dezman ZD. J Crit Care. 2020 Jun;57:246-252. PMID 31911086. *(Proposed idea for development or electronic tool, data analysis, manuscript prep)*

25. Graciano AL, Bhutta AT, **Custer JW**. Reduction in paediatric intensive care admission during COVID-19 lockdown in Maryland, USA. BMJ Paediatr Open. 2020 Nov 3;4(1). PMID: 33252796

26. Endicott KM, Friedrich R, **Custer JW**, Sarkar R, Rowen L, Anders MG. Preventing Retained Surgical Items During Endovascular Procedures: Bridging the Gap Between Guidelines and Practice. AORN J. 2020 Dec; 112(6): 625-633. PMID: 33252796*. (Multi-disciplinary collaboration)*

27. **Custer JW**, Simone S, Bhutta AT. Bedside Rounds in Intensive Care Units during the COVID-19 pandemic and beyond. Pediatr Intensive Care. 2021 Sep;10(3):21. PMID: 34395039

28. Larsen GY, Brilli R, Macias CG, et al. Improving Pediatric Sepsis Collaborative Investigators (**Custer JW**). Development of a Quality Improvement Learning Collaborative to Improve Pediatric Sepsis Outcomes. .Pediatrics. 2021 Jan;147(1). PMID: 33328337. ***(Site PI for national collaborative through Children’s Hospital Network, implemented quality improvement program, supervised data entry, process improvement and committee management)***

29. Ista E, Redivo J, Kananur P, Choong K, Colleti J Jr, Needham DM, Awojoodu R, Kudchadkar SR; International PARK-PICU Investigators (**Custer JW**). [Assessing Pain, Both Spontaneous Awakening and Breathing Trials, Choice of Sedation, Delirium Monitoring/Management, Early Exercise/Mobility, and Family Engagement/Empowerment Bundle Practices for Critically Ill Children: An International Survey of 161 PICUs in 18 Countries.](https://pubmed.ncbi.nlm.nih.gov/34259659/) Crit Care Med. 2021 Jul 13. PMID: 3425965. *(Site PI for international collaborative through PALISI network, data collection, data entry)*

30. Cifra CL, **Custer JW**, Singh H, Fackler JC. Diagnostic Errors in Pediatric Critical Care: A Systematic Review. Pediatr Crit Care Med. 2021 Aug 1;22(8):701-712. PMID: 33833203. [31. Bagdure DN, **Custer JW**, Foster CB, Blackwelder WC, Mishcherkin V, Portenoy A, Bhutta A. The Impact of Dedicated Cardiac Intensive Care Units on Outcomes in Pediatric Cardiac Surgery: A Virtual Pediatric Systems Database Analysis.](https://pubmed.ncbi.nlm.nih.gov/34395034/) J Pediatr Intensive Care. 2021 Sep;10(3):174-179. PMID: 34395034

32. Cifra CL, **Custer JW**, Fackler JC. Pursuing diagnostic excellence: A research agenda for critical care medicine. Critical Care Clinics. Crit Care Clin. 2022 Jan;38(1):141-157. PMID: 34794628

33. Foster C, Bagdure DN, **Custer JW**, Holloway A, Rycus P, Day Jenni, Bhutta A. Outcomes of Pediatric Patients with Sepsis Related to *Staphylococcus aureus* and Methicillin-Resistant *Staphylococcus aureus* Infections Requiring Extracorporeal Life Support: An ELSO Database Study. Front. Pediatr. 2001 Oct 8, 9:706638. PMID: 34692605**.** *(Initial study design, data analysis)*

**Non-peer reviewed journal articles**

1. **Custer, JW**; Spaeder M; Fackler JC. Critical Care Decision Support. Contemporary Critical Care. 6(1):1-9, June 2008.

**Books**

1. **Custer JW**; Rau R; Lee C. The Harriet Lane Handbook, 18th Edition. August 2008, Mosby

Primary editor for chapters written by pediatric resident – 1,184 pages, 30 Chapters

Coordinated decisions about layout and content with the printing company

Reviewed and edited formulary

Number one source of pediatric point of care clinical information

2. **Custer JW -** Pediatric ICU Resident Handbook

Johns Hopkins Pediatric Residency and Critical Care Fellowship Program – Re-edited every other year – 6 editions, 2006-present

University of Maryland Pediatric Residency and Critical Care Fellowship Program – 3 editions, 2011-present

1. Foster C, Grunauer, **Custer JW**. Manual De Emergencia y Cuidado Intensivos Pediatrico.

Handbook published for the acute and intensive care of pediatric patients. Translated into Spanish and distributed by the Ecuadorian government.

**Book Chapters**

1. **Custer JW.** Chapter 3: Procedures. Custer JW; Rau R; Lee C. *The Harriet Lane Handbook*, 18th Edition. August 2008, Mosby.

2. **Custer JW.** Chapter 27: Blood Chemistries and Body Fluids. Custer JW; Rau R; Lee C. *The Harriet Lane Handbook*, 18th Edition. August 2008, Mosby.

3. Lee C; **Custer JW**; Rau R. Chapter 29: Drug Doses. Custer JW; Rau R; Lee C. *The Harriet Lane Handbook*, 18th Edition. August 2008, Mosby.

4. **Custer JW.** Chapter 30: Formulary Adjunct. Custer JW; Rau R; Lee C. *The Harriet Lane Handbook*, 18th Edition. August 2008, Mosby.

5. **Custer JW**, Rapan K, Easley RB. Chapter 13: Pediatric Therapeutics.

Viessman SS, Lorins M, eds. *Pediatric Board Review*, Appleton and Lange, 2008

6. **Custer JW**, Thomas J, Straumanis JP. Nosocomial Infections in the Pediatric Intensive Care Unit. Rodgers Textbook of Pediatric Critical Care. Revision 2013.

7. **Custer JW**, Tumulty J. Family Engagement in the PICU. Current Concepts in Pediatric Critical Care.March 2020. <https://www.sccm.org/Education-Center/Clinical-Resources/Current-Concepts/Pediatric>

8. Thomas J, Haitt K, **Custer JW**. Nosocomial infections in the Pediatric Intensive Care Unit. Rodgers Textbook of Pediatric Critical Care. In Revision 2022.

**Abstracts**

1. **Custer JW**, Easley RB, Mulreany DG, Hager DN, Kazcka DW, Simon BA. *In vitro* performance comparison of the Sensormedics 3100A and B high-frequencyoscillatory ventilators (HFOV). Proc Am Thorac Soc 2008; American Thoracic Society A957. Toronto, Canada.

2.Easley RB, Lancaster CL, **Custer JW**, Fernandez-Bustamante A, Mulreany DG, Simon BA. Inactivation of Hypoxic Pulmonary Vasoconstriction Results in Acute Increase in Extravascular Lung Water Measurement by PiCCO in Canine Acute Lung Injury. Proc Am Thorac Soc*,* American Thoracic Society2008; A213. Toronto, Canada.

3. **Custer JW**, Dwyer J, Watson CM, Kaczka DW, Simon BA, Easley RB. Emergency Ventilator Performance Characteristics under Conditions of Adult and Pediatric Respiratory Failure. Proc Am Thorac Soc, American Thoracic Society 2009; A3071. San Diego, CA.

4. Ahmed A, **Custer JW**, Mulreany DG, Kaczka DW, Simon BA, Easley RB. The Effect of Piston Position on Tidal Volume Delivery During High-Frequency Oscillatory Ventilation. Proc Am Thorac Soc, American Thoracic Society, 2009; A5814. San Diego, CA.

5. **Custer JW**, McMillan K, Berkowitz I, Easley RB. Administration of volatile anesthesia via a conventional ventilator in critically ill children – clinical experience and *in* *vitro* assessment of impact on ventilator performance. Proc Am Thorac Soc, American Thoracic Society 2010; B106. New Orleans, LA.

6. **Custer JW**, Winters B, Goode V, Robinson K, BS, Pronovost PJ, Newman-Toker DE. Diagnostic error in the pediatric intensive care unit (PICU): A systematic review of autopsy studies. Diagnostic Error in Medicine, International Conference, 2010. Los Angeles, CA.

7. Winters B, **Custer JW**, Goode V, Robinson K, BS, Pronovost PJ, Newman-Toker DE. Diagnostic error in the Intensive care unit (ICU): A systematic review of autopsy studies. Diagnostic Error in Medicine, International Conference, 2010. Los Angeles, CA.

8. Spaeder MC; **Custer JW**; Bembea MM; Aganga DO; Song X; Scafidi S. A multi-center outcomes analysis of children with severe viral respiratory infection due to human metapneumovirus. Pediatric Academic Societies International Meeting. Abstract: 3844.512. Washington, DC.

9. **Custer JW**, Giudice EL, Lewin LO. Changing the quality improvement culture:   
A resident driven focus on system and process improvement. Association of Pediatric Program Directors, national conference. April 2013. Nashville, TN.

10. Cifra CL, Johnson JK, **Custer JW**. Invasive Community-associated Methicillin-resistant Staphylococcus aureus Infection Presenting as a Lemierre-like Syndrome in an Adolescent Boy. Pediatric Critical Care Colloquium 2013, Washington DC.

11. Spaeder MC; **Custer JW**; Miles AH; Razzi L; Morin NP; Scafidi S; Bembea MM; Song X. A multi-center outcomes analysis of children with severe respiratory infection caused by human rhinovirus. Society of Critical Care Medicine, 2014. San Francisco, CA.

12. Guidice EL, **Custer JW** – Poster Symposium for Individualized Curricula. Longitudinal pathways. Association of Pediatric Program Directors Spring 2014. Chicago, IL.

13. Tylka J, Spaeder M, **Custer JW**, et al. Severe Adenoviral Respiratory Infection in Immunocompromised Children. Society of Critical Care Medicine 2015: Abstract ID: 3124. Phoenix, AR.

14. Bagdure DN, **Custer JW**, Beam BW, Bhutta A. Burden of Encephalitis in the Pediatric Intensive Care Units in United States. Eastern Society of Pediatric Research 2015 – Philadelphia, PA.

15. Bagdure DN, **Custer JW**, Rao SR, Messacar K, Dominguez S, Beam BW, Bhutta A. The Hospital Impact and Resource Utilization of Pediatric Encephalitis over a 10 year period. Eastern Society of Pediatric Research, 2015 – Philadelphia, PA.

16. Coletti K, Bagdure DN, Walker LK, **Custer JW**. Utilization of High Flow Nasal Cannula in a Pediatric Intensive Care Unit at a Tertiary Children's Hospital. Pediatric Academic Society, 2015 – San Diego, CA; Abstract #753604.

17. Leone DM, Zaner C, CoHee L, **Custer JW**. Case report of a 3 month old female with prolonged fever, pulmonary nodules, and a rare diagnosis of Infantile Takayasu Arteritis. Academic Pediatric Association Region V Regional Meeting on March, 2016 in Peoria, IL; Pediatric Academic Society, May 2016, Baltimore, MD..

18. Torres N, Bagdure D, Walker LK, Waddell J, **Custer JW** Extracorporeal Membrane Oxygenation (ECMO) for Neonates with Congenital Renal and Urologic Anomalies and Pulmonary Hypoplasia: A Review of the Extracorporeal Life Support Organization (ELSO) Registry. The 8th World Congress on Pediatric Intensive and Critical Care, June 2016, Toronto, CA.

19. Foster C, Cabrera A, Moffett B, **Custer JW**, Bhutta AT. Characteristics and Outcomes of Children with Diaphragmatic Paresis after surgery for congenital heart disease: A Multi-Institutional Analysis. The 8th World Congress on Pediatric Intensive and Critical Care, June 2016, Toronto, CA.

20. Madden M, Linehan D, Johnson P, Ramdat E, **Custer JW**. Intrapulmonary percussive ventilation assist in weaning pediatric patients from ECMO AARC Congress 2016, San Antonio Texas. Abstract: 2530247.

21. **Custer JW**, Bagdure D, Holloway A, June A, Bhutta A. . Outcomes of Pediatric Patients with Sepsis Managed on Extracorporeal Membrane Oxygenation. CCM. 44 (12):425, December 2016

22. June A, Bagdure D, Holloway A, Bhutta A, **Custer JW**. Outcomes of Patients with Sepsis Related to Staph Aureus Managed on Extracorporeal membranous Oxygenation. CCM 44(12): 449, Dec 2016

23. Kienzle M, Attebery J, **Custer JW**, Remy K. High-flow Nasal Oxygen Reduces Intubation in Critically Ill Children with Respiratory Failure. CCM 44 (1):331, Dec 2016

24. Bagdure DN, Foster C, Blackwelder W, Mishcherkin V, Portenoy A, Graciano AL, **Custer JW**, Bhutta A. PCICS December 2017. The Impact of Dedicated CICUs on Outcomes in Pediatric Cardiac Surgery: A VPS Database Analysis

25. Canham LE, Silber MH, Millstein LS, **Custer JW**, Feigelman S, San Juan R, Giudice EL. Resident use of the Electronic Medical Record Outside of Work. Abstract 89. APPD, 2018.

26. Leonard J, Hines E, **Custer J**. Acute hemolysis following acetaminophen overdose in a patient with undiagnosed G6PD deficiency. NACCT 2018. Nashville, TN.

27. Bagdure DN, **Custer JW**, et al. Use of BabyBIG for Infantile Botulism in the PICU in the United States. SCCM 2019. Abstract 367

28. Bagdure DN, **Custer JW**, et al. The Burden of Gun Violence in Pediatric Intensive Care Units in the United States. SCCM 2019. Abstract 392.

29. Cifra CL, **Custer JW**, et al. Diagnostic Uncertainty Among Critically Ill Children Admitted to the Pediatric Intensive Care Unit: A Multi-Center Study. Platform/oral presentation at: American Academy of Pediatrics National Conference and Exhibition, October 2021

29. Cifra CL, **Custer JW**, et al. Characteristics of Diagnostic Error in Pediatric Critical Care: A Multi-Center Study. Abstract presentation at the Society of Critical Care Medicine Annual Congress, February 2022, Puerto Rico

**Published media**

**Local**

1. The Baltimore Sun **–** Maryland Hospital Beds for Kids are Filling up

<https://www.baltimoresun.com/coronavirus/bs-md-pediatric-covid-20210818-qkruyn754nesbm3ghwgdlyixrq-story.html>

1. **Custer JW**. Maryland Public Television – February 2022. Covid impact on children.

<https://youtu.be/SlbICeJa9ZQ?t=666>

1. **Custer JW**. Fox 45 – February 2022. Covid impact on children and masks.

<https://foxbaltimore.com/morning/university-of-maryland-school-of-medicine-doctor-on-masks-going-forward>

**National**

1. **Custer JW,** Parker M. Society of Critical Care Medicine Podcast: *Diagnostic Errors in PICU and NICU,* December 2014
2. **Custer JW**. XM Doctor’s Radio. Interview on Toy Safety. December 2016
3. Freidrich R**, Custer JW**. Designed for Failure. <https://aamiblog.org/2019/07/19/friedrich-custer-designing-for-failure/>
4. **Custer JW.** The National Desk – WJLA – Kids and Covid August 2021.<https://www.facebook.com/watch/live/?ref=watch_permalink&v=2125829167592628>
5. **Custer JW.** MSNBC – The Last Word with Lawrence O’Donnell August 2021

<https://archive.org/details/MSNBCW_20210821_050000_The_Last_Word_With_Lawrence_ODonnell>

1. **Custer JW**. The National Desk – WJLA – Kids and Covid September 2021

https://www.facebook.com/watch/live/?ref=watch\_permalink&v=902029467119916

1. **Custer JW**. The National Desk – WJLA – Kids and Covid

<https://wjla.com/news/coronavirus/dr-jason-custer-medical-director-pediatric-icu-university-of-maryland-childrens-hospital-covid-19-pandemic-answers-your-questions>

**Major Invited Speeches**

Local

1. **Custer JW**. Department of Pediatric Grand Rounds – Mercy Hospital, Baltimore Maryland. Dec 2011.
2. **Custer JW**. Department of Pediatrics Morbidity and Mortality Grand Rounds – 6-8 sessions per year 2011-present. Baltimore, MD.
3. **Custer JW**. Pediatric Brain Death. Living Legacy Foundation Local Seminar. December 2012. Baltimore, MD.
4. **Custer JW**. Pediatric Medicine Enhances Pediatric Surgery. UMMS Board of Directors invited speaker, September 2013. Baltimore, MD.
5. **Custer JW**. Respiratory Care of the pediatric patient with critical heart disease. University of Maryland Respiratory Symposium. April 2014. Baltimore, MD
6. **Custer JW**. Department of Pediatrics Grand Rounds – Mercy Hospital, Baltimore, MD. What’s new in the PICU? June 2014.
7. **Custer JW**. Lardieri A. Interdisciplinary Professionalism. School of Pharmacy. September 2014. Baltimore, MD.
8. **Custer JW**. A culture of quality. University of Maryland Children’s Hospital Board of Visitors. September 2014. Baltimore, MD.
9. **Custer JW**. Department of Pediatrics Grand Rounds – St. Agnes Hospital. Diagnosis and Diagnostic Error in Critical Ill Pediatric Patients. October 2014. Baltimore, MD.
10. **Custer JW,** Margo J, Morgan D. University of Maryland IHI Student Interest group. Overview of Quality Improvement panel discussion for medical students. November 2015, Baltimore MD.
11. **Custer JW,** Giudice EL. Department of Pediatric Grand Rounds – University of Maryland Department of Pediatrics. *Promoting Resilience – Helping our Learners of Helping Ourselves.* November 2015 Baltimore, MD.
12. **Custer JW,** Thom K**.** Quality Improvement and Patient Safety as a Teaching Tool. University of Maryland Medical Center Graduate Medical Education Retreat. May 2017, Baltimore, MD.
13. **Custer JW.** Work-Life Integration. Pediatric Residency Graduation Keynote speaker.
14. **Custer JW,** Simke MJ. Collaboration to Create a Patient Safety Net for Hospitalized Pediatric Patients. University of Maryland Medical Center Quality Board of Directors. May 2018, Baltimore, MD.
15. **Custer JW.** Organization and Delegation. GME Chief Resident Forum 2018 - present
16. **Custer JW.** Creating of Patient Safety Net for Hospitalized Pediatric Patients. University of Maryland Pediatric Chiefs Counsel. Nov 2018.
17. **Custer JW.** Diagnostic Process, Diagnostic Error and Cognitive Bias. Radiology Quality Academy. Nov 2019.
18. **Custer JW.** Institutional Strategies for Physician Wellness and Resiliency – the interface of safety and well-being – Graduate Medical Education Wellness and Resiliency Conference. Spring 2021
19. **Custer JW.** Institutional Safety Culture. UMMC Quality & Safety Faculty Development Academy
20. Goel N. **Custer JW**. Introduction to Just Culture. Introduction to Clinical Medicine Fall 2021
21. **Custer JW**. Institutional Safety Culture. Department of Medicine Quality Institute. Fall 2021
22. **Custer JW**. Safety Culture and Wellness. Resident/Fellow Quality and Safety Rounds December 2021
23. **Custer JW**. Difficult Case Discussion and Just Culture. Department of Psychiatry Resident M&M Conference. December 2021

**National**

1. **Custer JW**. *On-line Conference Tracking* ***-*** Association of Pediatric Program Directors. Regional Meeting 2007, Washington, DC.
2. **Custer JW.** Rounding and Family Engagement in the PICU. Society of Critical Care Medicine National Conference – Pediatric Critical Care Current Concepts, March 2020.
3. Gulati M**, Custer JW.** Just Culture for Physicians. Washington Medical Association Physician Leadership. 2021

**International**

1. **Custer JW.** Response to Error: Just Culture and Team Dynamics. Pakistani Physicians Leadership Academy. June 2021.

**Proffered Communications**

1. **Custer JW**, Coldwell D. Radiofrequency Tissue Ablation: A study of Temperature Distribution, Ultrasound Imaging and Clinical Results. University of Maryland Medical Student Research Symposium, August 2000. Baltimore, MD.

2. **Custer JW**, Fackler JC, Nichols DG. Defining team based cognition and workflow in pediatric critical care using cognitive task analysis: A Preliminary Study. Johns Hopkins Department of Anesthesia and Critical Care Medicine Research Day, December 2009. Baltimore, MD.

3. Strohm-Farber J, Novack D, **Custer JW**. The Pediatric Early Warning Score (PEWS):  Implementation of a Standardized Tool and Algorithm to Identify and Respond to Evolving Critical Illness in Children. UMMC Clinical Practice Summit. September 2012. Baltimore, MD.

4. Torres N, Bagdure D, Walker LK, Waddel J, **Custer JW**. Extracorporeal Membrane Oxygenation (ECMO) for Neonates with Congenital Renal Anomalies: A Review of the Extracorporeal Life Support Organization (ELSO) Registry. Pediatric Research Day. Baltimore, MD. December 2015.

5. Nguyen V, Lardieri A, Kishk O, Simone S, **Custer JW**. The Use of Dexmedetomidine for Sedation in Mechanically Ventilated Patients in the Pediatric Intensive Care Unit. University of Maryland School of Pharmacy Research Day, December 2015.