

**LISA H. MERCK MD MPH MA FACEP**

Virginia Commonwealth University / Medical College of Virginia  
Department of Emergency Medicine  
1250 E. Marshall Street  
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**RESEARCH FOCUS and SPECIALIZATION:**

- Collaborative Clinical Trials in Acute Care Research
- Critical Care
- Pediatric and Adult Neurological Emergencies
- Epidemiology and Health Policy
- Fundamentals of Informed Consent
- Applications of Novel Technology in Clinical Trial Execution

**EDUCATION:**

Undergraduate	Reed College, Portland, OR (1991-1995) Bachelor of Arts, Psychology, 1995
Medical School	The Chicago Medical School, North Chicago, IL (7/1998-6/2002) Medical Doctor, 2002
Masters of Public Health	Oregon Health and Sciences University, Portland, Oregon (6/1997-6/2002) Masters of Public Health, Epidemiology and Biostatistics, 2002
Master of the Arts	Brown University, Providence, RI (7/2018) Master of Arts, ad eundem (upon academic promotion)

**COMPLETED POSTGRADUATE TRAINING                      6/2002-11/2008:**

General Surgery Internship PGY I	2002-2003	Duke University Medical Center
Neurosurgery Resident PGY II-III	2002-2005	Duke University Medical Center
Emergency Medicine Residency	2006-2008	University of North Carolina at Chapel Hill

**POST GRADUATE HONORS AND AWARDS:**

2026	Office of the Provost, Grant: Resilience, Advancement, & Discovery in Neurologic Translational Science (RADIANT) Initiative (MPI: Merck, Salloum). Virginia Commonwealth University, Richmond, VA
2023	Tenure, Professor of Emergency Medicine, Virginia Commonwealth University School of Medicine, Richmond, VA
2019 - 2022	Teaching Scholar, Office of the Provost, University of Florida, Gainesville, FL

- 2021 Elected by the Society for Academic Emergency Medicine to serve as a liaison to the NIH Center for Scientific Review.
- 2020 Recipient, International Critical Care Congress, Society of Critical Care Medicine - *Star Research Achievement Award*. For abstract, Outcome Prediction with Computer-Assisted Volumetry and ABC/2 in Traumatic Intra-Axial Hemorrhage. Owen Leary, Tyler Harder, David Liu, Stefan Jung, Maria Braileanu, Jason W Allen, Derek Merck, David W. Wright, Lisa H. Merck, Orlando, FL 2/2020.
- 2020 Recipient, International Critical Care Congress, Society of Critical Care Medicine - *Star Research Achievement Award*. For abstract, Patient-Specific Prognostication After TBI Is Related to Bleed Phenotype and Anatomic Location. Tyler Harder, Owen Leary, David Liu, Derek Merck, David W Wright, Lisa H. Merck, Orlando, FL 2/2020.
- 2019 Recipient, *Master of Arts, ad eundem*, Brown University, Providence, RI
- 2018 Recipient, *Outstanding Investigator Award*, Department of Emergency Medicine, Warren Alpert Medical School of Brown University, Providence, RI
- 2018 Acceptance to Association of American Medical Colleges (AAMC) *Mid-Career Women Faculty Leadership Development Seminar*, Atlanta, GA
- 2018 *Certificate of Outstanding Contribution in Reviewing*, American Journal of Emergency Medicine
- 2017 Recipient, Neurocritical Care Society International Conference, *Top Scored Abstract*, for: *Goal Directed Therapy in the ProTECTIII Clinical Trial: The Effect of Physiologic Transgressions on Patient Mortality after Traumatic Brain Injury*. Lisa Merck MD MPH, Sharon Yeatts PhD, Geoff Manley MD PhD, Robert Silbergleit MD, Robin Conwit MD, Qi Pauls MS, Michael Frankel MD, Peter Le Roux MD, Yuko Palesch PhD, David Wright MD.
- 2017 Recipient, Neurocritical Care Society, International Conference, *Top Scored Abstract*, for: *Goal Directed Therapy in the ProTECTIII Clinical Trial: The Effect of Physiologic Transgressions on Patient Functional Outcome after Traumatic Brain Injury*. Lisa Merck MD MPH, Sharon Yeatts PhD, Geoff Manley MD PhD, Robert Silbergleit MD, Robin Conwit MD, Qi Pauls MS, Michael Frankel MD, Peter Le Roux MD, Yuko Palesch PhD, David Wright MD.
- 2015 Recipient, *Translational Impact Award*, Department of Emergency Medicine, Warren Alpert Medical School of Brown University
- 2015 Recipient, *Barnet Fain Quality Award, Honorable Mention*, Rhode Island Hospital Comprehensive Stroke Center
- 2014 Nominated and chosen for *Clinical Trials Methodology Course Cohort*, via R25 grant NINDS, University of Michigan
- 2013 Fellow, American College of Emergency Physicians
- 2011 Emory University Informed Consent for Computed Tomography practice referenced in: *Radiation Safety in Imaging, Best Practices in Health Care*

The Joint Commission Perspectives in Patient Safety. May 2011, Vol 11, Issue 5  
 Joint Commission on Accreditation of Health Care Organizations  
 In reference to, *Informed Consent for Computerized Tomography*

- 2011 Recipient, *Clinical and Translational Science Award for Informed Consent for Computed Tomography*. Emory University Research Development Course, Emory University Hospital, Atlanta, Georgia
- 2010 Nominated and chosen to attend the *Navigating the Waters* course, CORD (Council of Emergency Medicine Residency Directors), Orlando, Florida
- 2007 Recipient, *Stroke Mini-Fellowship for Emergency Medicine Residents*. Grant from Novo Nordisk, Protein Design Labs, and Concentric Inc. 5/2007 New York, New York
- 2005 Recipient, *General Surgery/Transplant Surgery Education Fund Grant*, Duke University Medical Center, Durham, North Carolina
- 2001 Recipient, National Health Service Core/Department of Health and Human Services, SEARCH Program of Chicago, IL; stipend awarded for clinical care within underserved region of Chicago

### **PROFESSIONAL DEVELOPMENT, LICENSES, & BOARD CERTIFICATION:**

2010 – Active License:	American Board of Emergency Medicine
2022 – Active License:	Commonwealth of Virginia, Medical Board
2019 – Active License:	Florida Medical Board
2007 – Active License:	North Carolina Medical Board
2008 – Active License:	Georgia Medical Board
2012 – 2020 License:	Rhode Island Medical Board

### **ACADEMIC APPOINTMENTS, UNIVERSITY GOVERNANCE:**

#### Virginia Commonwealth University (VCU), Medical College of Virginia, Richmond, VA

University Faculty Senate Representative, VCU	6/2026 – 6/2029
University Council Representative, VCU	6/2026 – 6/2028
Resilience, Advancement, & Discovery in Neurologic Translational Science in Neurologic Translational Science (RADIANT) Initiative, Executive Director and MPI, VCU	3/2026 – current
Professor of Emergency Medicine, VCU	5/2022 – current
Professor with Tenure, VCU	6/2023 – current
Vice Chair of Research, Department of Emergency Medicine	5/2022 – current
Medical Director Clinical Trials Collaborative, VCU Health System	5/2022 – current
Affiliate Professor of Neurosurgery, VCU	7/2025 – current
Affiliate Professor of Physical Medicine & Rehabilitation, VCU	1/2026 – current
Assistant Dean, Acute Care Research & Clinical Trials, VCU COM	5/2022 – 7/2025

University of Florida College of Medicine, Gainesville, FL

7/2019 – 4/2022 Associate Professor, Department of Emergency Medicine  
 7/2019 – 7/2021 Vice Chair of Emergency Medicine Research  
 7/2021 – 7/2022 Director, Clinical Trials Collaborative  
 5/2021 – 4/2022 Affiliate Associate Professor, Department of Neurology, Neurocritical Care  
 4/2020 – 6/2022 Affiliate Associate Professor, Dept. of Health Outcomes and Biomedical Informatics

Warren Alpert Medical School of Brown University, Providence, RI

8/2019 – current Adjunct Associate Professor of Neurosurgery  
 6/2016 – current Mentor, Scholarly Concentration, Translational Research in Medicine  
 7/2012 – 6/2018 Assistant Professor of Emergency Medicine, Diagnostic Imaging, and Neurosurgery  
 7/2018 – 7/2019 Associate Professor of Emergency Medicine, Diagnostic Imaging, and Neurosurgery  
 1/2016 – 7/2019 Director, Division of Emergency Neurosciences & Critical Care Research, Department of Emergency Medicine

Tufts University, Clinical and Translational Science Institute, Boston, MA

7/2017 – current: Adjunct Associate Professor of Medicine, Division of Clinical Care  
 Research Institute for Clinical Research and Health Policy Studies  
 Scholar, Tufts Clinical and Translational Science Institute

Emory University School of Medicine, Atlanta, Georgia

11/2008 – 6/2012: Assistant Professor of Emergency Medicine  
 Core Faculty, Division of Emergency Neurosciences

**HOSPITAL APPOINTMENTS / CLINICAL SERVICE:**

05/2022 – current Attending Physician: Virginia Commonwealth University Medical Center  
 Main Hospital, Richmond, Virginia  
 07/2019 – 04/2022 Attending Physician: Shands Hospital, Gainesville, FL  
 07/2012 – 07/2019 Attending Physician: Rhode Island Hospital & The Miriam Hospital, Providence, RI  
 11/2008 – 07/2012 Attending Physician: Emory University Hospital, Emory Midtown Hospital,  
 & Grady Memorial Hospital, Atlanta, GA

**OTHER PROFESSIONAL APPOINTMENTS:****INTERNATIONAL:**

2026 Grant review, KU Leuven Industrial Research Fund Council, C2E funding, University of Leuven, Belgium  
 2025 – current World Health Organization: Global Optimization of Respiratory Support Collaboration [health systems improvement; invasive mechanical ventilation; non-invasive support]  
 2025 – current Canadian Emergency Department Research Network / Centre for Research on Pandemic Preparedness and Health Emergencies (CEDRN / CRPPHE) Pandemic Preparedness Steering Committee

2025 – current	Canadian Emergency Department Research Network (CEDRN) Protocol Review Committee
2023 – current	International Initiative for Traumatic Brain Injury Research (InTBIR): Clinical Trials Working Group; Combined Neuroimaging and Biomarkers Working Group
2022 – current	InTBIR: Imaging Working Group
2017 – current	NIH, National Institute of Neurological Disorders and Stroke (NINDS): Brain Oxygen Optimization in Severe Traumatic Brain Injury - Phase 3 Clinical Trial (BOOST-3), Executive Committee
2015 – current	NIH/NINDS: Brain Oxygen Optimization in Severe Traumatic Brain Injury-Phase 3 Clinical Trial (BOOST-3), Co-Lead, Clinical Standardization Team
2021 – 2025	National Institutes of Health (NIH), National Heart, Lung, and Blood Institute (NHLBI): Novel Experimental COVID Therapeutic Agents Targeting RAAS, (NECTAR). Executive Committee: Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV4d) Master Protocol for Clinical Trials targeting host tissue and the renin - angiotensin - aldosterone system (RAAS) in hospitalized patients with COVID-19
2013	Scientific Research Department Brain Foundation of the Netherlands, The Hague, Grant Review

#### International, Peer Review:

2025 – current	Reviewer, Critical Care Congress 2026, Chicago, IL
2025 – current	<i>Neurosurgical Review</i> , Springer, Ad-hoc Reviewer, Springer Nature
2025 – current	Reviewer, <i>European Journal of Medical Research</i> , Springer Nature
2025 – current	Reviewer, <i>Critical Care Medicine</i> , Lippincott
2023 – 2024	<i>Journal of Clinical and Translational Science</i> , Cambridge Univ Press, Guest Editor
2021 – 2023	International Stroke Conference, Abstract Review Committee
2016 – 2019	International Stroke Conference, Abstract Review Committee
2011 – 2013	International Stroke Conference, Abstract Review Committee

#### NATIONAL:

2025 – 2026	Study Section, Grant Review: Autism Data Science Initiative (ADSI), National Institutes of Health (NIH).
2025	Study Section, Grant Review: Clinical Care and Health Interventions, 2025/05 ZRG1 F16-D (20) L. National Institutes of Health (NIH).
2024 – 2025	Department of Defense (DoD): Scientist Reviewer, FY24 Congressionally Directed Medical Research Programs Translational Research - Traumatic Brain Injury and Psychological Health Program (TBIPHRP).
2024 – current	Steering Committee: Enhancing Healthcare Delivery and Patient Outcomes: Noninvasive Wireless Thermal Sensors to Improve Ventricular Shunt Monitoring, Reduce Imaging, and Alleviate the Burden on Providers, Patients, and Families, Rhaeos, Inc
2023 – current	National Institutes of Health (NIH), National Institute of Neurological Disorders and Stroke (NINDS), National Heart, Lung, and Blood Institute (NHLBI): The Strategies to Innovate Emergency Care Clinical Trials Network (SIREN): Education, Training, and Collaboration Working Group
2023 – current	National Neurotrauma Society – Abstract Review Committee
2023 – current	Co-Director, SIREN Extracorporeal Cardiopulmonary Resuscitation (ECPR) Workgroup
2021 – current	Center for Women in Academic Medicine & Science, member

2019 – current	NIH/NINDS/NHLBI: SIREN Steering Committee
2018 – current	Association of American Medical Colleges (AAMC): Group on Women in Medicine and Science (GWIMS), member
2018 – current	NIH/NINDS/NHLBI: SIREN / NETT Operations Committee
2018 – current	NIH/NINDS/NHLBI: Brain Oxygen Optimization in Severe TBI Phase 3 (BOOST3) Clinical Trial Executive Committee
2018 – current	NIH/NINDS/NHLBI: Lead, Electronic Data Capture Committee, SIREN clinical trials network
2021 – 2025	Study Steering & Executive Committee: Novel Experimental COVID Therapies Affecting Host Response (NECTAR). Clinical trials targeting macro-, micro-immuno-thrombosis, vascular hyperinflammation, hypercoagulability, and renin-angiotensin-aldosterone system (RAAS) in hospitalized patients with COVID-19 (ACTIV-4 Host Tissue) NIH/NHLBI
2019 – 2024	Dept of Health and Human Services (DHHS), Agency for Healthcare Research and Quality (AHRQ), Health Care Research Training (HCRT) Study Section Member
2017 – 2023	NIH/NINDS: External Oversight Board, for the Network for Excellence in Neuroscience Clinical Trials (NeuroNEXT)
2023	AHRQ National Research Service Award, Institutional Research Training T32 Study Section; Special Emphasis Committee
2021 – 2022	Society for Critical Care Medicine Membership Committee, Florida Chapter
2021 – 2022	Co-Chair: Society for Academic Emergency Medicine, Neurologic Emergencies Interest Group
2020	AHRQ: Patient Centered Outcomes Research (PCOR) Grants and Cooperative Agreements to Evaluate Health System and Healthcare Professional Responsiveness to COVID-19, Study Section Member, Department of Health and Human Services
2020 – 2022	PCOR: Healthcare Worker Exposure Response and Outcomes (HERO), Ancillary Sub-Committee, Publications
2019 – 2020	DoD: Scientific Reviewer for the 2019 Peer Reviewed Medical Research Program
2019 – 2020	Neurotrauma, National Trauma Research Action Plan (NTRAP) The NTRAP project is supported by a grant from the Department of Defense, managed by the Coalition for National Trauma Research (CNTR)
2019 – 2020	DoD: United States Army Medical Research and Materiel Command, Military Medical Research and Development. (MRMC Combat Casualty Care [CCC]), Scientific Reviewer
2018 – 2019	NIH/NINDS: Scientific Reviewer, StrokeNet Clinical Trials and Biomarker Studies for Stroke Treatment, Recovery, and Prevention
2018 – 2019	Clinical and Translational Research Institute (CTSI): Chair, Tufts Emergency Medicine Expert Panel
2014 – 2019	Society for Academic Emergency Medicine, Ethics Committee
2018	Society for Academic Emergency Medicine, National Meeting Abstract Review
2018 – 2020	Society for Academic Emergency Medicine, Research Committee
2017	DoD: Congressionally Directed Medical Research Programs (CDMRP) - Scientific Reviewer, Combat Casualty Care Research Program (CCCRP)
2017 – 2019	CTSI: Tufts, Tufts Medical Center - Emergency Medicine Expert Panel
2015 – 2016	Department of Health and Human Services (DHHS), NIH: Scientific Reviewer, Health Services Organization and Delivery Study Section (HSOD), Healthcare Delivery and Methodologies Integrated Review Group
2015	DoD: Congressionally Directed Medical Research Programs - Scientific Reviewer, Clinical Trials Section
2014 – 2015	DHHS, NIH: Scientific Reviewer, Health Services Organization and Delivery Study

2009 – 2019	Section (HSOD), Healthcare Delivery and Methodologies Integrated Review Group NIH/NINDS: Very Early Administration of Progesterone for Acute Traumatic Brain Injury (ProTECT III) - Clinical Standardization Team
2015 – 2016	Chair, Society for Academic Emergency Medicine, Neurologic Emergency Research Interest Group
2014 – 2015	Vice Chair, Society for Academic Emergency Medicine, Neurologic Emergency Research Interest Group
2014 – 2015	National Task Force, Patient Centered Outcomes Research, Society for Academic Emergency Medicine, Consensus Conference on Diagnostic Imaging in the ED: A Research Agenda to Optimize Utilization
2013 – 2014	Society for Academic Emergency Medicine: Neurological Emergencies Committee, Consensus Conference on Gender Specific Medicine
2012	Society for Academic Emergency Medicine- Member, Research Committee
2011 –	Ad-hoc Reviewer, Journal of Neurotrauma, Mary Ann Leibert Inc.
2011 –	Ad-hoc Reviewer, Academic Emergency Medicine, Wiley Blackwell
2011 –	Ad-hoc Reviewer, Annals of Emergency Medicine, Elsevier
2011 –	Ad-hoc reviewer, West J of Emergency Medicine, Dept of EM, UC Irvine
2010 –	Society for Academic Emergency Medicine, Neurologic Emergencies Interest Group
2009	Society for Academic Emergency Medicine, Task Force: Residents as Researchers 2009 Ad-hoc reviewer, Emergency Medicine Reports, AHC Media LLC
2010 – 2012	Ad-hoc reviewer, Critical Care, BioMed Central
2010 –	Ad-hoc Reviewer, American Journal of Emergency Medicine, Elsevier

### **HOSPITAL / DEPARTMENTAL COMMITTEES & ACTIVITIES:**

2026 – current	Attending Physician - Unique Pathogens Unit, Virginia Commonwealth University Health System (VCUHS)
2025 – current	VCU - VCUHS Trauma Multidisciplinary Patient Care Committee
2022 – current	Advanced Resuscitation Cooling Therapeutics and Intensive Care Leadership Committee (ARCTIC), VCUHS - Core Clinical Faculty
2022 – current	Director, Clinical Trials Collaborative, VCUHS/VCU
2022 – current	Lead, Research Operations Committee, Department of Emergency Medicine, VCU
2026 – 2027	Chair, Promotion and Tenure Committee for Lindsay Taylor MD FACEP FAEMUS, Associate Professor of Emergency Medicine, Co-Director of Emergency Ultrasound Fellowship, VCU
2026 – 2027	Promotion and Tenure Committee for Pawan Suri MD, Associate Professor of Emergency Medicine and Division Head of Observational Medicine, VCU
2025 – 2026	Chair, Promotion and Tenure Committee for John Michael Joyce MD, Associate Professor of Emergency Medicine & Diagnostic Imaging, VCU
2025 – 2026	Chair, Promotion and Tenure Committee for Megan Donohue MD MPH, Assistant Professor of Emergency Medicine & Internal Medicine, VCU
2024 – 2025	Promotion and Tenure Committee for Taruna Aurora MD, Assistant Professor of Emergency Medicine & Internal Medicine, VCU
2023 – 2026	VCU - VCUHS Collaboration Taskforce
2024	VCU School of Medicine (SOM) Leadership Academy, Office of Faculty Affairs and Faculty Development
2022 – 2025	Emergency Medicine Faculty Search Committee, VCU
2020 – 2022	One Florida Clinical Research Consortium

2020 – 2022	Co-chair, Wellness Committee Dept of Emergency Medicine, University of Florida
2020 – 2021	COVID Response Command Center, University of Florida
2019 – 2021	Faculty Search Committee, Dept of Emergency Medicine, University of Florida
2019 – 2021	Chair, Research Committee, Dept of Emergency Medicine, University of Florida
2019 – 2022	Promotion and Tenure Committee, Dept of Emergency Medicine, University of Florida
2018	Peer review, University Emergency Medicine Foundation, Faculty Academic Development Award, Brown University
2018 – 2019	2% Working Group, Dept of Emergency Medicine Brown University
2018 – 2019	Revenue Enhancement Committee, Dept of Emergency Medicine Brown University
2017 – 2018	Trauma Committee, Rhode Island Hospital
2014 – 2019	Institutional Review Board, Rhode Island Hospital
2014 – 2019	Rapid Response Team, Institutional Review Board, Rhode Island Hospital
2013 – 2019	Stroke Committee, Rhode Island Hospital
2012 – 2013	Emergency Department MRI Committee, Rhode Island Hospital
2009 – 2010	Grady Trauma Committee, Grady Memorial Hospital, Atlanta, GA
2003 – 2005	Emergency Management Sub-Committee, Duke University Medical Center, Durham, NC

### **UNIVERSITY COMMITTEE & COUNCIL SERVICE:**

2026 – current	Resilience, Advancement, & Discovery in Neurologic Translational Science (RADIANT) Initiative; Contact MPI/Executive Director, VCU, Richmond, VA
2025 – current	Enterprise Neurosciences, Steering Committee, Neurosurgery, VCU, Richmond, VA
2024 – current	Institutional Review Board (IRB), VCU, Richmond, VA
2024 – current	Peer-Review Committee for Promotion and Tenure, Department of Emergency Medicine, VCU, Richmond, VA
2023 – current	Member, Center for Rehabilitation Science and Engineering (CERSE), Research Capacity Building Council, VCU, Richmond, VA
2023 – current	Grant reviewer, MD-PhD Wright Scholar Grant Review Panel, VCU, Richmond, VA
2022 – current	Director, Research, Education, and Mentorship cycle (REM cycle), VCU/VCUHS, Richmond, VA
2022 – current	Chair, Research Committee, Department of Emergency Medicine, VCU, Richmond, VA
2022 – current	Member, Operations Committee, Wright Center for Clinical and Translational Research, VCU, Richmond, VA
2022 – current	Member, Faculty Executive Committee, VCU, School of Medicine, Richmond, VA
2022 – current	Director, Clinical Trials Collaborative VCU/VCUHS, Richmond, VA
2024 – 2025	Clinical Operations Service Agreement (COSA) / Clinical Education and Research Service Agreement Review Committee, VCU/VCUHS, Richmond, VA
2023 – 2025	Member, Chair's Interdepartmental Research Collaboration, VCU/VCUHS, Richmond, VA
2023 – 2024	Member, One VCU Human Research and Clinical Trials - Initiative (HRCT-I) Advisory Council, VCU/VCUHS, Richmond, VA
2023 – 2024	Co-Chair, Operations Sub-Committee, HRCT-I, VCU/VCUHS, Richmond, VA
2023 – 2024	Member, Regulatory Sub-Committee, HRCT-I, VCU/VCUHS, Richmond, VA
2022	Member, Thesis Review Committee, Clinical and Translational Sciences, Master of Science (MS) VCU, Richmond, VA
2021 – 2022	University of Florida / Florida State University CTSA Scientific Review Committee
2020 – 2022	Steering and Advisory Committee, University of Florida Traumatic Brain Injury Center
2020 – 2022	COVID-19 Scientific Review Committee and Peer Assistance Working Group (SRCWG)
2020 – 2022	Institutional Review Board-01, University of Florida, Gainesville, FL
2015 – 2019	Pediatric Emergency Medicine Research Committee, Brown University, Providence, RI
2014 – 2019	Institutional Review Board, Rhode Island Hospital (for Brown University health sciences)

research), Providence, RI  
 2012 University Research Council, Review Committee, Emory University, Atlanta, GA  
 2009 – 2012 Institutional Review Board, Emory University, Atlanta, GA  
 2009 – 2012 Center for Injury Control, Emory University, Atlanta, GA  
 2009 – 2012 Emergency Medicine Wellness Committee, Emory University, Atlanta, GA  
 2008 – 2012 Emergency Medicine Research Committee, Emory University, Atlanta, GA  
 2006 – 2007 Resident Quality Council, University of North Carolina, Chapel Hill, NC  
 2000 Institutional Review Board, The Chicago Medical School, North Chicago, IL  
 1999 – 2000 Student Council, The Chicago Medical School, North Chicago, IL  
 1999 – 2001 President, Clinical Research Interest Group, The Chicago Medical School, North Chicago, IL  
 1998 – 1999 President, Emergency Medicine Clinical Research Interest Group, The Chicago Medical School, North Chicago, IL  
 1991 – 1995 Student Chair, Wellness Committee/HIV counseling center development, Reed College, Portland, OR

## **GRANTS & CLINICAL RESEARCH:**

### **Active Extramural:**

2023 – current SIREN | CORE-EM Hub Alliance  
 Network for Emergency Care Clinical Trials: Strategies to Innovate Emergency Care Clinical Trials Network (SIREN)  
 NIH NHLBI NINDS U24NS100673-06 (MPI: Merck- contact, Wright, Papa, Selker, Mosier, Jones)  
 2/1/2023 – 1/31/28  
 Role: Multiple Principal Investigator, contact-PI

2025 – current Ketamine add-on therapy for Established Status Epilepticus Treatment Trial (KESETT)  
 NIH NINDS [1UG3NS131532-01A1](#) (MPI: Kapur, Chamberlain, Rosenthal, Silbergleit)  
 1/15/2025 – 12/31/2030  
 Role: Hub Principal Investigator, Site Principal Investigator

2025 – current WIN Ration Analysis to Determine a Strategy of Non-Invasive Support for Respiratory Failure in the Emergency Department (WINDSURFER).  
 NHLBI 1UG3HL175260-01 (Wang, Mosier, Tidswell)  
 09/15/2025 - 9/14/2030  
 Role: Site Principal Investigator

2025 – current Fluid management of Acute decompensated heart failure Subjects Treated with Reprieve System - FASTR II Trial.  
 Reprieve Cardiovascular Inc.  
 9/2025 – 9/2027  
 Role: Site Principal Investigator

2025 – current Corticotrophin Releasing Factor 2 Agonist for the Treatment of Worsening Heart Failure (WHF) – The CRAFT-WHF Study  
 Protocol Number COR1167-201  
 EU CT number: 2024-518951-52  
 9 September 2025 – current  
 Corteria Pharmaceuticals

## Role: Site Principal Investigator

- 2024 – current      Development of wireless, wearable flow sensors for continuous, long-term tracking of cerebrospinal fluid dynamics in patients with hydrocephalus.  
NIH NINDS 1UG3NS130338-01A1 (PI: Webb)  
Subaward: Long-Term Tracking of Fluid Dynamics in Cerebrospinal Fluid Shunts with a Wireless Thermal Anisotropy Measurement Device During Activities of Daily Living Including Sleep (Site PI, Merck)  
9/01/2024 – 12/31/2025  
Role: Site Principal Investigator
- 2024 – current      Enhancing Healthcare Delivery and Patient Outcomes: Noninvasive Wireless Thermal Sensors to Improve Ventricular Shunt Monitoring, Reduce Imaging, and Alleviate the Burden on Providers, Patients, and Families  
NINDS NIH NIH NINDS 2R44NS121555-04 (PI Somera)  
Subaward: Assessment of Flow in Cerebrospinal Fluid Shunts with a Wireless Thermal Anisotropy Measurement Device in Asymptomatic Patients (Site PI, Merck)  
Subaward: Repeated Assessment of Flow in Cerebrospinal Fluid Shunts with a Wireless Thermal Anisotropy Measurement Device in an Emergent Setting (Site PI, Merck)  
12/09/2024 – 11/30/2025  
Role: Site Principal Investigator, Steering Committee
- 2024 – 2025      Development of a Noninvasive, Wireless Telemedicine Flow Sensor for Patients with Hydrocephalus (PI Somera)  
Subaward: Longitudinal Measurements of Flow in Cerebrospinal Fluid Shunts with a Wireless Thermal Anisotropy Measurement Device in People with Chronic Headaches (Site PI, Merck)  
NSF SBIR Phase II FAIN 2037171  
7/18/2024 - 12/31/2025  
Role: Site Principal Investigator
- 2023 – current      Patterns of Survivors' Recovery Trajectories in the ICECAP trial (POST-ICECAP)  
NIH K00021632 (PI Meurer)  
06/01/2023-05/31/2028  
Role: Hub Principal Investigator, Site Principal Investigator
- 2018 – current      Brain Oxygen Optimization in Severe Traumatic Brain Injury-Phase 3 (BOOST-3) CCC  
NIH / NINDS U01NS099046-01A1 (MPI: Barsan, Dias, Shutter, Yeatts)  
International, 60 center, adult and pediatric randomized clinical trial to assess the effect of Pbt02 in goal directed therapy for severe TBI.  
07/01/2018 – 11/30/2025  
Direct Cost: Administrative effort (20% FTE) and per pt reimbursement  
Roles: Hub Principal Investigator; Executive Committee; Co-Director, National Clinical Standardization Team
- 2019 – current      Influence of cooling duration on efficacy in cardiac arrest patients (ICECAP)  
NIH / NINDS / NHLBI 1UG3HL145269-01A1 (MPI: Meurer, Romergrzyko, Silbergleit)  
9/19/2019 – 12/31/2025  
Direct cost: per pt reimbursement  
Role: Hub Principal Investigator, Site Principal Investigator

- 2024 – current      Multi-Arm Multi-Stage Adaptive Platform Trial for Acute Treatment TBI (APT-TBI-01) TBIDT-MOD1 UCSF, TRACK-TBI NET, Transforming Research and Clinical Knowledge in Traumatic Brain Injury Clinical Trials Network  
UCSF / DoD [NCT05826912](#) (PI Manley)  
Direct cost: per pt reimbursement  
12/2024 – 8/2029 UCSF (Manley)  
Role: Site co-investigator
- 2023 – current      Wright Regional Center for Clinical and Translational Science  
National Center for Advancing Translational Sciences: UM1TR004360 (FG Moeller)  
5/1/2023-4/30/2030  
Project Goal: The overall goal is to develop methods that overcome roadblocks in clinical and translational science (CTS) to support equitable advancement of translational science across our rural and diverse region that can be deployed throughout the CTSA network  
Direct cost: Administrative effort (10% FTE)  
Role: Site Co-Investigator, Operations Committee
- 2019 – current      Biomarkers in the Brain Oxygen Optimization in Severe TBI Trial (Bio-BOOST)  
DOD, USAMRAA W81XWH1910829 (MPI: Diaz, Korley)  
Direct cost: per pt reimbursements  
Role: Hub Principal Investigator
- 2022 – current      TRACK-TBI NET, Transforming Research and Clinical Knowledge in Traumatic Brain Injury Clinical Trials Network  
Multi-Arm Multi-Stage Adaptive Platform Trial for Acute Treatment TBI  
TBIDT-MOD1 UCSF (Manley)  
11/2022 – TBD UCSF (Manley)  
Role: Site co-investigator / Clinical PI

**Active Intramural:**

- 2026 – current      Resilience, Advancement, & Discovery in Neurologic Translational Science (RADIANT) Initiative (MPI: Merck, Salloum). Office of the Provost, Virginia Commonwealth University. Role: Contact MPI/Executive Director

**Grants in preparation:**

- 2024 –              ECPR-INSIGHT, Implementation of an optimized extracorporeal CPR (ECPR) chain-of-survival bundle. Jarrod Mosier, Lisa Merck for the SIREN investigators; *application in preparation: NHLBI, NINDS*
- 2025 –              Window for Initiating Treatment of OWL-1410 for Traumatic Brain Injury (WIT-TBI) trial. Will Haskins, Lisa Merck, *in review NINDS*

**Prior research:**

- 2024 – 2025              Assessment of flow in cerebrospinal fluid shunts with a wireless thermal

anisotropy measurement device in asymptomatic patients.  
 Protocol ID: Rhaeos 2023-03, RB  
 Revision Date: January 25, 2024  
 Sponsor: Rhaeos, Inc., Evanston, IL  
 6/1/24 – 5/30/25  
 Role: Site Principal Investigator

- 2022 – 2025 Feasibility Study of a Single Platform Solution (SPS) for Blood Testing of TBI Biomarkers Army Medical Research and Materiel Command (AMRMC); TBIPHRP; W81XWH22C0059 (PI: William Haskins PhD)  
 W81XWH22C0059-LM (sub PI: Lisa Merck MD MPH)  
 9/26/22-3/26/25  
 Role: Clinical PI
- 2021 – 2024 Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV4d). Master Protocol for Clinical Trials targeting host tissue and the renin-angiotensin - aldosterone system (RAAS) in hospitalized patients with COVID-19. Novel Experimental COVID Therapeutic Agents targeting RAAS, (NECTAR). CONNECTS Master Protocol for Clinical Trials Targeting Macro-, Micro-immuno-thrombosis, Vascular Hyperinflammation, and Hypercoagulability and Renin-angiotensin-aldosterone System (RAAS) in Hospitalized Patients With COVID-19 (ACTIV-4 Host Tissue).  
 NHLBI NCT04924660 (PI: Collins)  
 8/1/2021 – 09/30/24  
 Direct cost: Administrative effort and per pt reimbursement  
 Role: Site Co-Investigator, Executive Committee
- 2022 – 2024 Transforming Research and Clinical Knowledge in TBI (TRACK-TBI): Clinical Evaluation of the i-STAT TBI Test  
 Abbot Pharmaceuticals, Univ of California San Francisco (UCSF), (Manley)  
 11/2022 – 07/2024  
 Role: Site Principal Investigator
- 2017 – 2022 SIREN | CORE-EM Hub Alliance  
 Network for Emergency Care Clinical Trials: Strategies to Innovate EmeRgENcy Care Clinical Trials Network (SIREN)  
 NIH NHLBI NINDS 1 U24 NS100673-01 (MPI: Wright-contact, Merck, Papa, Selker, Cairns, Jones)  
 07/15/2017 – 12/31/2022  
 Role: Multiple Principal Investigator
- 2022 – 2024 AdvanceBox  
 Nimbus Research Laboratory, LLC  
 Non-clinical PI at Lifespan, in kind  
 Community resource architecture to assist in bystander life support measures
- 2021 – 2022 Early intervention augmenting GABA-ergic pathways: The VIGAB-STAT IIa VIGABatrin in post-anoxic STATus epilepticus. Outcomes after cardiac arrest depend on the severity of global brain injury resulting from the ongoing injury due to gaps between brain energy supply and demand (secondary brain injury). Our overarching goal is to improve outcomes of individuals who experience refractory seizures after cardiac arrest

via an open-label trial using Vigabatrin. The goal of this study is to demonstrate that vigabatrin can be absorbed when given in the post-cardiac arrest period.

American Heart Association (PI: Maciel)

Role: Site Co-investigator, Faculty Mentor

- 2020 – 2022  
Epidemiology of COVID-19 in First Responders  
CTSI: Rapid-Response Translational Research Projects to Address COVID-19 Pandemic  
UL1TR001429, NIH NCATS (MPI: Merck, Morris)  
4/29/20 – 6/1/22  
Role: MPI
- 2020 – 2021  
COVID-19 Among Children in North Central Florida  
CTSI: Rapid-Response Translational Research Projects to Address COVID-19 Pandemic  
UL1TR001429, NIH NCATS (MPI: Nelson, Morris)  
6/1/20 – 6/1/22  
Role: Site Co-Investigator
- 2021 – 2022  
Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV4c)  
A multicenter, adaptive, prospective, randomized trial evaluating the efficacy and safety of antithrombotic strategies in patients with COVID-19 following hospital discharge.  
NINDS, NHLBI, BARDA, OWS, HHS (PI: Ortel)  
4/29/21 – 8/30/22  
Direct cost: per pt reimbursement  
Role: Site Principal Investigator
- 2021 – 2022  
CoVPN 3006 A randomized controlled study to assess SARS CoV-2 infection, viral shedding, and subsequent potential transmission in university students immunized with Moderna COVID-19 Vaccine  
NIH / NIAID  
Role: Site Co-investigator
- 2021 – 2022  
Kinetics of Antibody, B Cell and T Cell Responses to SARS-CoV-2 mRNA Vaccines in Solid tumor and Lymphoma Patients.  
Comparative Diagnostic and Population Medicine College of Veterinary Medicine  
University of Florida Veterinary Medicine (PI: Maureen T. Long DVM PhD)  
Role: Co-investigator
- 2021 – 2022  
Multi-arm Optimization of Stroke Thrombolysis (MOST): a single blinded, randomized controlled adaptive, multi-arm, adjunctive-thrombolysis efficacy trial in ischemic stroke. (MOST)  
NINDS U01 NS100699 (MPI: Adeoye, Grotta)  
6/11/21- 2/2024  
Direct cost: per pt reimbursement  
Role: Site Principal Investigator
- 2021 – 2022  
Sensor Evaluation of Neurologic Status in Emergencies (SENSE Device), SENSE-003. A Prospective, Two-Stage, Non-randomized, Multi-center Within Patient Comparison Study to Evaluate the SENSE Device's Ability to Monitor Intracranial Hemorrhage.  
SENSE Diagnostics (PI: Opeolu Adeoye)  
Direct cost: per pt reimbursement  
Role: Site Principal Investigator

- 2020 – 2021 Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV4b)  
COVID-19 Outpatient Thrombosis Prevention Trial: A multicenter adaptive randomized placebo-controlled platform trial evaluating the efficacy and safety of antithrombotic strategies in COVID-19 adults not requiring hospitalization at time of diagnosis.  
NHLBI (PI: Connors)  
9/1/20-9/1/21  
Direct cost: per pt reimbursement  
Role: Site Principal Investigator
- 2020 – 2021 Clinical-trial of COVID-19 Convalescent Plasma in Outpatients (C3PO)  
A multicenter, two arm, randomized, single-blind trial clinical trial to determine if receiving one dose of convalescent plasma (CP) for mild COVID-19 illness prevents illness progression.  
7/1/20 – 12/31/22  
NIH NHLBI NINDS U24NS100659, U24NS100655 (MPI: Callaway;  
Durkalski-Mauldin; Korley, MD, PhD)  
Direct cost: per patient reimbursement  
Role: Site Principal Investigator
- 2020 – 2021 A Phase 2/3 Randomized, Placebo-Controlled, Double-Blind Clinical Study to Evaluate the Efficacy, Safety, and Pharmacokinetics of MK-4482 in Hospitalized Adults with COVID-19 (MK-4482)  
Merck, Sharp, & Dohme Corp  
10/23/2020-10/22/2021  
Direct Cost: Per pt reimbursement  
Role: Site Co-investigator
- 2020 – 2021 A Randomized Controlled Trial of Losartan with COVID-19 (ALPS-COVID)  
Bill and Melinda Gates Foundation (Tignanelli and Puskarich)  
University of Minnesota, IND 148365  
4/15/20 – 5/15/21  
Total Award: per pt reimbursement  
Direct cost: per pt reimbursement  
Role: Site Principal Investigator
- 2020 – 2021 A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Assess the Efficacy and Safety of Ruxolitinib in Participants With COVID-19-Associated ARDS Who Require Mechanical Ventilation (RUXCOVID-DEVENT)  
Incyte Corporation: INCB018424-369  
5/24/20 – 4/30/21  
Direct cost: per pt reimbursement  
Role: Site Principal Investigator
- 2020 – 2021 R10933-10987-COV-2067: A Master Protocol Assessing the Safety, Tolerability, and Efficacy of Anti-Spike (s) SARS-CoV-2 Monoclonal Antibodies for the Treatment of Ambulatory Patients with COVID-19  
Regeneron Pharmaceuticals: Grant #: HHSO100201700020C  
10/1/20 – 3/31/21  
Total Award: Per pt reimbursement  
Role: Site Co-investigator

- 2018 – 2020 Artificial Intelligence for Modeling and Treatment of Stroke and Traumatic Brain Injury (AIM Study)  
NIH/NCATS 5U24TR001609-02 (Hanley)  
Johns Hopkins - Tufts Trial Innovation Center Subaward #2003844252 (MPI: D Merck and L Merck)  
05/01/2018 – 04/30/2020  
Role: Principal Investigator
- 2020 – 2021 Preventing COVID-19 Infections: Healthcare Worker Exposure Response and Outcomes (HERO) Registry and Hydroxychloroquine (HERO-HCQ) Trial  
PCORI COVID 19-2020-001 (Adrian Hernandez)  
3/31/20 – 6/30/21  
Role: Site Principal Investigator, Publications Committee
- 2017 – 2020 Established Status Epilepticus Treatment Trial (ESETT)  
NIH / NINDS 1U01NS088034 (Kapur)  
09/30/2014 – 08/31/20  
Direct cost/year: per patient enrollment  
This study is designed to determine the most effective and/or the least effective treatment of ESE among patients older than two years by comparing three arms: fosphenytoin (FOS), levetiracetam (LEV), and valproic acid (VPA).  
Role: Site Principal Investigator (effort per pt enrollment)
- 2018 – 2019 Tufts Clinical and Translational Science Institute  
NIH/NCATS UL1TR002544 (Selker)  
NIH Sub 102188-00001 (Merck)  
Chair, Tufts Clinical and Translational Research Institute, Emergency Medicine Expert Panel  
09/01/2018-04/30/2023  
Role: Co-Investigator
- 2018 – 2019 The ACCESS Trial, Access to the cardiac catheterization laboratory in patients without ST-segment elevation myocardial infarction resuscitated from out-of-hospital ventricular fibrillation cardiac arrest  
NIH/NHLBI 5U01HL133818-02 (Aufderheide and Yannopoulos)  
9/15/2016-5/31/2021  
Direct cost/year: per patient enrollment  
Determine survival to hospital discharge with Modified Ranking Scale Score  $\leq 3$  in adult 18-75 years old) patients resuscitated from out-of-hospital VT/VF cardiac arrest who do not have ST-segment elevation on emergency department 12-lead ECG (no-STEMI) randomized to receive either: 1) initial CCL admission, or 2) initial ICU admission.  
Role: Site Principal Investigator
- 2019 Randomized, Controlled, Single-blind Study of Probable Benefit of the *Neuro-Spinal Scaffold*™ for Safety and Neurologic Recovery in Subjects with Complete Thoracic AIS A Spinal Cord Injury as Compared to Standard of Care In Vivo Therapeutics: InVivo-100-105  
Role: Site Co-Investigator

- 2018  
Spring  
Vertex Pharmaceuticals Incorporated VX15-210-101  
A Phase 2b/3, Double-blind, Randomized, Placebo-controlled, Multicenter Study to Assess the Efficacy and Safety of VX-210 in Subjects with Acute Traumatic Cervical Spinal Cord Injury  
IND Number: 11,672  
Role: Site Co-Investigator
- 2018 – 2019  
Southern New England Partnership in Stroke Research, Innovation, and Treatment (SPIRIT)  
NIH/NINDS 1U24NS107215-01 (Sheth, Alberts, Furie)  
8/15/2018 – 7/31/2019  
Role: Site Co-Investigator
- 2016 – 2017  
ProTECT3D  
NIH / NINDS 5 U01 NS062778-05REV (Wright)  
Subaward T721754 (MPI: Merck/Merck)  
9/1/2016 – 6/30/2017 (NCE)  
Role: Principal Investigator
- 2016 – 2017  
PERSEUS: Targeted Delivery of Multi-Parametric Telemetry Clinical Messages to Mitigate Alarm Fatigue  
AHRQ R18 HS022860 (Kobayashi)  
10/01/2014 – 09/30/2017  
Role: Site Co-Investigator
- 2013 – 2017  
Progesterone for the Treatment of Traumatic Brain Injury (ProTECTIII) NIH / U01NS062778 (Wright)  
07/01/2009 – 07/30/2017 (NCE)  
Direct Award: individual administrative and per patient enrollment  
The primary objective is to determine the effect of administering intravenous progesterone (initiated within 4 hours of injury and administered for 72 hours, followed by an additional 24 hour taper) vs. placebo for treating victims of moderate to severe (GCS 12-4) TBI.  
Roles: National Clinical Standardization Team National Publications Committee  
Site Principal Investigator
- 2017 – 2020  
ESCAPE-NA1 Trial  
A Multicenter, Randomized, Double-blinded, Placebo-controlled, Parallel Group, Single- dose Design to Determine the Efficacy and Safety of Intravenous NA-1 in Subjects with Acute Ischemic Stroke Undergoing Endovascular Thrombectomy  
NoNO Inc. Krembil Research Institute (Hill)  
3/1/2017 – 4/2020  
Role: Site Co-Investigator
- 2016 – 2018  
Endovascular Therapy Following Imaging Evaluation for Ischemic Stroke 3 (DEFUSE3)  
NIH / NINDS 1U01NS092076-01A1 (Albers)  
07/01/2016 – 08/31/2020  
Direct cost/year: per patient enrollment  
Role: Site Co-Investigator

- 2014 – 2018 Automated Ventricular Analysis: Medical Image Analysis in Hydrocephalus National Center for Advancing Translational Sciences  
NIH / UL1 TR000430 (University of Chicago)  
Role: Principal Investigator
- 2013 – 2017 Biomarkers of Injury and Outcome in ProTECT III (BIO-ProTECT)  
NIH / 1R01 NS071867 (Frankel)  
05/01/2011 – 04/30/17  
Direct Cost/year: sub-award, per patient enrollment  
The major goal of this study is to determine whether protein biomarkers of traumatic brain injury predict outcome and response to treatment with progesterone  
Role: Site Principal Investigator
- 2013 – 2017 NETT - Neurological Emergencies Treatment Trials Hub / Spoke Network NIH / NINDS 1 U10 NS059032-01 (Baren)  
09/01/2012 – 05/31/17  
Direct cost/year: sub-award, per patient enrollment  
This grant provides support to the Neurological Emergency Treatment Trial Network Collaborative NETT – GPSNJ Greater Philadelphia - Southern New Jersey  
Role: Site Principal Investigator
- 2012 – 2018 Futility Study of Deferoxamine Mesylate in Intracerebral Hemorrhage(i-DEF)  
National Institutes of Health (NIH) / U01 NS074425 (Beth Israel)  
10/2014 – 08/2018  
cost/year: sub-award, per patient enrollment  
The purpose of this study is to determine whether treatment with Deferoxamine Mesylate is of sufficient promise to improve outcome before pursuing a larger clinical trial to examine its effectiveness as a treatment for intracerebral hemorrhage.  
Direct Cost/year: subcontract, per-patient enrollment  
Role: Site Co-Investigator
- 2010 – 2018 Platelet-Oriented Inhibition in new TIA and minor ischemic stroke (POINT)  
NIH 1U01NS062835 (Johnston)  
09/30/2009 – 06/30/2018  
Direct Cost/year: subcontract, per-patient enrollment  
The purpose of this study is to determine whether clopidogrel 75 mg/day by mouth after a loading dose of 600 mg is effective in improving survival free from major ischemic vascular events (ischemic stroke, myocardial infarction, and ischemic vascular death) at 90 days when initiated within 12 hours of TIA or minor ischemic stroke onset in patients receiving aspirin.  
Role: Site Principal Investigator
- 2015 – 2016 ProTECT3D  
NIH / NINDS 5 U01 NS062778-05REV (Wright)  
Subaward T129489 (Merck)  
12/30/2015 – 6/30/2016 (NCE)  
Role: Principal Investigator
- 2010 – 2016 ATACH-II: Antihypertensive Treatment of Acute Cerebral Hemorrhage: A Phase III Randomized Multicenter Clinical Trial of Blood Pressure Reduction for Hypertension in Acute Intracerebral Hemorrhage.

- NIH / U01 NS062091 (Qureshi)  
08/01/2010 – 07/31/2016  
Direct Cost/year: sub-award per patient enrollment  
The purpose of this study is to definitively determine the efficacy of early, intensive, antihypertensive treatment using intravenous (IV) nicardipine initiated within 3 h of onset of ICH and continued for the next 24 h in subjects with spontaneous supratentorial ICH. Direct Cost/year: sub-award, per patient enrollment.  
Role: Site Principal Investigator
- 2014 – 2016      Validation of ShuntCheck-Micro-Pumper, a noninvasive diagnostic procedure NIH / NINDS SBIR #5R44NS067772-04 (Fritz, Swoboda)  
07/01/2014 – 06/30/2016  
Direct Cost/year: per patient enrollment  
Role: Site Principal Investigator
- 2015 – 2016      RELAX AHF2, A multicenter, randomized, double-blind, placebo controlled phase IIIb study to evaluate the efficacy, safety and tolerability of Serelaxin when added to standard therapy in acute heart failure patients.  
Novartis Pharmaceuticals CRLX030A2301 (Metra and Teerlink)  
09/01/2015 – 06/01/2016  
Role: Site Co-Investigator
- 2014 – 2015      IntelliSport: Musculoskeletal and Closed Head Injury Prevention in Athletic Training  
Intel Corporation (Merck, L)  
08/01/2014 – 04/01/2015  
Role: Principal Investigator
- 2011 – 2012      Informed Consent for Computerized Tomography  
Supported in part by PHS Grant UL1 RR025008 (Merck)  
Clinical and Translational Science Award Program National Institutes of Health, National Center for Research Resources  
08/01/2011 – 08/01/2012  
Role: Principal Investigator
- 2010 – 2012      High-Dose Albumin Therapy for Neuroprotection in Acute Ischemic Stroke (ALIAS) NIH / U01NS040406 (Ginsberg)  
07/01/2000 – 05/31/2015  
Direct Cost/year: per-patient payments  
Role: Emory Site Co-Investigator
- 2009 – 2012      Neurological Emergency Treatment Trial Network (NETT)  
NIH / U10NS059032 (Wright)  
01/01/2009 – 05/31/2017  
The major goal of this project is to build a research network of investigators at metro-Atlanta hospitals for clinical trials to develop effective treatments for patients with neurological emergencies.  
Role: Co-Investigator, NETT-SEC
- 2009 – 2012      Traumatic Brain Injury Studies at Grady Memorial Hospital  
DoD W81XWH-09-2-0145 (Haley)  
09/1/2009 – 4/20/2011 (NCE)

Department of Defense, Telemedicine and Advanced Technology Research Center

1. Investigation and Comparison of DETECT, ANAM, and Neuropsychological Testing in the Detection of Mild Traumatic Brain Injury

2010 – 2011      Rapid Anticonvulsant Medications Prior to Arrival Trial (RAMPART)  
 NIH / U01NS056975 (sub-award with University of Michigan)  
 08/01/2007 – 05/31/2015  
 Direct Cost/year: per patient payment  
 Role: Emory Site Co-Investigator (indirect support via NETT award)

**OTHER RESEARCH EFFORT & RESEARCH EFFORT IN KIND:**

2025 – current      Collaborator, Canadian Institutes of Health Research, Sustaining and Expanding the Canadian Emergency Department Research Network to Improve Pandemic and Health Emergencies Preparedness

2020 – 2022      Determination of risk factors and clinical course for infection with coronavirus or other possible emerging pathogens that may be identified concurrently  
 Role: PI First Responder COVID Testing, University of Florida, Gainesville

2012 – 2016      Prognosis and Decision Making in Intracerebral Hemorrhage: Family Perspectives.  
 NIH 1K23AG038731-01A1 (University of Michigan)  
 Role: Site Co-Investigator

2009 – 2011      Utilization of Informed Consent for Computerized Tomography.  
 Emory University School of Medicine, Departments of Emergency Medicine and Radiology, Atlanta, Georgia

2006 – 2008      Effect of Emergency Department overcrowding on time to critical testing: EKG and Head CT. University of North Carolina at Chapel Hill, Department of Emergency Medicine, Chapel Hill, North Carolina

2005 – 2006      Evaluation of subdural hematoma in the neonatal population. University of North Carolina at Chapel Hill, Department of Computer Science/Medical Imaging, Neurodevelopment, Chapel Hill, North Carolina

2005 – 2006      Three-dimensional imaging of the neonatal brain. University of North Carolina at Chapel Hill, Department of Computer Science/Medical Imaging, Neurodevelopment, Chapel Hill, North Carolina

2002 – 2005      The development of myelomeningocele in post-operative tethered cord patients, a review of the literature. Duke University Medical Center, Durham, North Carolina

1999 – 2002      Chiari-pseudotumor Syndrome. Clinical Research Extern- Section of Pediatric Neurosurgery, The University of Chicago Children's Hospital, Chicago, Illinois

2001 – 2002      MPH Thesis- Asthma Protocols in an Urban Emergency Department. Mount Sinai Hospital, Chicago, IL and the Oregon Health and Sciences University, Portland, OR

- 1996 – 1998 Clinical case and research assistant- Department of Neurological Surgery, Oregon Health and Sciences University, Portland, Oregon
- 1997 – 1998 Cognitive effects of cerebral spinal fluid shunt failure in hydrocephalic children. Epidemiology and Biostatistics Intern- Department of Neurological Surgery, Oregon Health and Sciences University, Portland, Oregon
- 1997 – 1998 Expansion of dialysis parameters in End-Stage Renal Disease. Epidemiologic Consultant- Optimal Renal Care, Southern California Kaiser Permanente Medical Group, and the Health Care Financing Administration
- 1996 – 1997 Breast and Cervical Cancer Project. Research Assistant- Multnomah County Health Department, Portland, Oregon
- 1996 – 1997 Review of HIV legislation on identification and treatment of high-risk pediatric populations in California and Oregon. Research Assistant- Multnomah County Health Department, Portland, Oregon

**PATENTS: Scientific Contributions to Patent Applications and Provisional Filings (Pending/Published):**

Drone Backpack Systems. U.S. Patent No. 11,945,581 B2 (Issued April 2, 2024).

Combinatorial Temporal Biomarkers and Precision Medicines with Detection and Treatment Methods for Use in Neuro Injury, Neuro Disease, and Neuro Repair.  
EP Application No. 19 897 288.1; U.S. Application No. 17/413,747.

Synergistic Biomarker Assay of Brain-Specific Abnormal Neurological Condition Using Myelin Oligodendrocyte Glycoprotein.  
U.S. Provisional Application No. 63/627,869.

Biomarker Panel for Brain-Specific Abnormal Neurological Conditions Using Biofluid Samples.  
PCT Application No. PCT/US2023/080001 (WO2024107948A1).

Sampling and Testing Solution for Brain Health and Injury from Various Sources and Correlations Therebetween.  
U.S. Provisional Application No. 63/657,396.

Protein Biomarkers for Acute, Subacute, and Chronic Traumatic Injuries of the Central Nervous System.  
U.S. Application No. 15/308,934.

Protein Biomarkers for Acute, Subacute, and Chronic Traumatic Injuries of the Central Nervous System.  
EP Application No. 20153859.2A.

Protein and Peptide Biomarkers for Traumatic Injury to the Central Nervous System.  
U.S. Application No. 17/269,041 (Published as US20210270847A1).

## **BIBLIOGRAPHY**

### **Original Publications in Peer-reviewed Journals:**

1. George, T.M., **Fagan L.H.**, Adult tethered cord syndrome in patients with post-repair myelomeningocele: an evidence-based outcome study. *J. Neurosurgery: Ped* 102:150-156, 2005. PubMed PMID: 16156223.
2. **Fagan LH**, Ferguson S, Yassari R, Frim DM. The Chiari pseudotumor cerebri syndrome: symptom recurrence after decompressive surgery for Chiari malformation type I. *Pediatric Neurosurgery*. 2006;42(1):14-9. PubMed PMID: 16357496.
3. Looney CB, Smith JK, **Merck LH**, Wolfe HM, Chescheir NC, Hamer RM, Gilmore JH. Intracranial hemorrhage in asymptomatic neonates: prevalence on MR images and relationship to obstetric and neonatal risk factors. *Radiology*. 2007 Feb; 242(2):535-41. PubMed PMID: 17179400.
4. **Merck LH**, Hauck MG, Houry DE, Lowery-North DW, Hemphill RR, Applegate KE. Informed Consent for Computed Tomography. *American Journal of Emergency Medicine*. 2011 Feb;29(2):230-2. Epub 2010 Nov 5. PubMed PMID: 21115314.
5. American College of Surgeons Trauma Quality Improvement Program Guidelines, Traumatic Brain Injury. H Gill Cryer MD FACS, Geoffrey T Manley MD PhD FACS, P David Adelson MD PhD FACS, Aziz S Alali MD, J Forrest Calland MD FACS, Mark Cipolle MD PhD, Christopher Cribari MD FACS, Matthew L Davis MD FACS, Mark R Hemmila MD FACS, J Claude Hemphill MD, Michael Huang MD, Randeep Jawa MD, Todd Kilbaugh MD, Rosemary Kozar MD FACS, Andrew IR Maas MD PhD, **Lisa H Merck MD MPH FACEP**, Avery B Nathens MD FACS, Claudia Robertson MD, Phiroz Tarapore MD, Shelley Timmons MD PhD, Jamie Ullman MD, Alex Valadka MD, David W Wright MD FACEP. *Committee on Trauma Expert Panel 1/2015, American College of Surgeons*.  
<https://www.facs.org/~media/files/quality%20programs/trauma/tqip/traumatic%20brain%20injury%20guidelines.ashx>
6. Wright DW, Espinoza TE, **Merck LH**, Ratcliff JR, Backster A, Stein DG. Gender Differences in Neurological Emergencies Part II: A Consensus Summary and Research Agenda on Traumatic Brain Injury. *Academic Emergency Medicine*, published first online, 24 Nov 2014 DOI:10.1111 / acem.12535. PubMed PMID: 25420582; PubMed Central PMCID: PMC4311997.
7. Wright DW, Yeatts SD, Silbergleit R, Palesch YY, Hertzberg VS, Frankel M, Goldstein FC, Caveney AF, Howlett-Smith H, Bengelink EM, Manley GT, **Merck LH**, Janis LS, Barsan WG; NETT Investigators. Very early administration of progesterone for acute traumatic brain injury. *N Engl J Med*. 2014 Dec 25;371(26):2457-66. doi: 10.1056/NEJMoa1404304. Epub 2014 Dec 10. PMID: 25493974; PMCID: PMC4303469.
8. Joseph B Miller MD MS, Laura Heitsch MD, Matthew S Siket MD MS, Jon W Schrock MD, Charles R Wira III MD, Christopher Lewandowski MD, Tracy E Madsen MD ScM, **Lisa H Merck MD MPH**, David W Wright MD. The 2015 ACEP Clinical Policy on tPA for Stroke: What is Best for Our Patients? Efficacy in the First Three Hours. *Academic Emergency Medicine*, published first online 6/26/15 ISSN 1069-6563 1 doi: 10.1111/acem.12712 PII ISSN 1069-6563583. PubMed PMID: 2611336
9. Hemal K Kanzaria MD MSHPM, Aileen McCabe, Zachary Meisel MD MPH MSc, Annie LeBlanc PhD,

- Jason T Schaffer MD, M. Fernanda Bellolio MD, William Vaughan, **Lisa H Merck MD MPH**, Kimberly E Applegate MD MS, Judd E Hollander MD<sup>1</sup>, Corita R Grudzen MD MSHS<sup>1</sup>, Angela M Mills MD, Christopher R Carpenter MD MSc, and Erik P Hess MD MSc. Advancing Patient-Centered Outcomes in Emergency Diagnostic Imaging: A Research Agenda. *Academic Emergency Medicine*, Volume 22, Issue 12, pages 1435–1446, December 2015, published first online 11/2015 DOI:10.1111/acem.12832 2015. PubMed PMID: 26574729.
10. Amber K Sabbatini MD, **Lisa H Merck MD MPH**, Adam Froemming MD, William Vaughan, Michael D Brown MD MSc, Erik P Hess MD MSc, Kimberly Applegate MD, Nneka Comfere MD. Patient-Centered Communication and Multidisciplinary Care Coordination in Emergency Diagnostic Imaging: A Research Agenda. *Academic Emergency Medicine*, Volume 22, Issue 12, December 2015, Pages: 1427–1434; published first online 11/2015 DOI:10.1111/acem.12832 2015. PubMed PMID: 26575785.
  11. **Lisa H Merck MD MPH**, Laura Ward MSPH, Esther Choo MD MPH, Kimberly Applegate MD MS, Douglas Lowery-North MSPH, Katherine Heilpern MD. Written Informed Consent for Computed Tomography of the Abdomen/Pelvis is Associated with Decreased CT Utilization in Low-Risk Emergency Department Patients. *Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health (WestJEM)*, Vol XVI no 7 Dec 2015. <http://escholarship.org/uc/item/7t36f8dt>. PMID: 26759646; PubMed Central PMCID: PMC4703183.
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  13. Miller JB, **Merck LH**, Wira CR, Meurer WJ, Schrock JW, Nomura JT, Siket MS, Madsen TE, Wright DW, Panagos PD, Lewandowski C. The Advanced Reperfusion Era: Implications for Emergency Systems of Ischemic Stroke Care. *Ann Emerg Med*. 2017 Feb;69(2):192-201. doi: 10.1016/j.annemergmed.2016.06.042. Epub 2016 Sep 3. PMID: 27600649.
  14. Krishna Murthy, Owen Leary, **Lisa H Merck**, Benjamin Kimia, Scott Collins, David W Wright, Jason W Allen, Derek Merck. Machine learning algorithm for automatic detection of CT-identifiable hyperdense lesions associated with traumatic brain injury. *Proc. SPIE 10134, Medical Imaging 2017: Computer-Aided Diagnosis*, 101342G (March 23, 2017); doi:10.1117/12.2254227, DOI link: <http://dx.doi.org/10.1117/12.2254227>.
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  16. Shellie L Asher MD, Kenneth V Iserson MD, **Lisa H Merck MD MPH**. Society for Academic Emergency Medicine Statement on Plagiarism. *Academic Emergency Medicine*. PMID 28628260 DOI: [10.1111/acem.13241](https://doi.org/10.1111/acem.13241)
  17. Denninghoff KR, Nuño T, Pauls Q, Yeatts SD, Silbergleit R, Palesch YY, **Merck LH**, Manley GT, Wright DW. Prehospital Intubation is Associated with Favorable Outcomes and Lower Mortality in ProTECT III. *Prehosp Emerg Care*. 2017 Sep-Oct;21(5):539-544. doi: 10.1080/10903127.2017.1315201. Epub 2017 May 10. PMID: 28489506; PMCID: PMC7225216.

18. Nuño T, Denninghoff KR, Pauls Q, Yeatts SD, Silbergleit R, Palesch YY, **Merck LH**, Manley G, Wright DW. Reply to: Prehospital Intubation: Further Confounders in Trial Results. *Prehosp Emerg Care*. 2018 Jul-Aug;22(4):537. doi: 10.1080/10903127.2017.1408729. Epub 2018 Jan 17. PMID: 29338483.
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63. Meurer WJ, Schmitzberger FF, Yeatts S, Ramakrishnan V, Abella B, Aufderheide T, Barsan W, Benoit J, Berry S, Black J, Bozeman N, Broglio K, Brown J, Brown K, Carlozzi N, Caveney A, Cho SM, Chung-Esaki H, Clevenger R, Conwit R, Cooper R, Crudo V, Daya M, Harney D, Hsu C, Johnson NJ, Khan I, Khosla S, Kline P, Kratz A, Kudenchuk P, Lewis RJ, Madiyal C, Meyer S, Mosier J, Mouammar M, Neth M, O'Neil B, Paxton J, Perez S, Perman S, Sozener C, Speers M, Spiteri A, Stevenson V, Sunthakar K, Tonna J, Youngquist S, Geocadin R, Silbergleit R; ICECAP trial investigators. Influence of Cooling duration on Efficacy in Cardiac Arrest Patients (ICECAP): study protocol for a multicenter, randomized, adaptive allocation clinical trial to identify the optimal duration of induced hypothermia for neuroprotection in comatose, adult survivors of after out-of-hospital cardiac arrest. *Trials*. 2024 Jul 23;25(1):502. doi: 10.1186/s13063-024-08280-w. PMID: 39044295; PMCID: PMC11264458. <https://doi.org/10.1186/s13063-024-08280-w> \*Supplementary Appendix. Role: Site Principal Investigator, SIREN.
64. Safdar B, Desir G, Zhou B, Deng Y, Guo X, Files DC, Busse LW, Shotwell M, Chappell MC, Self WH, Collins SP; ACTIV-4 Host Tissue Investigators. Association between plasma catecholamine concentration and mortality in hospitalized adults with COVID-19: a secondary analysis of a multicenter randomized trial. *Crit Care*. 2025 May 8;29(1):183. doi: 10.1186/s13054-025-05334-6. PMID: 40340814; PMCID: PMC12060399. Role: Site Principal Investigator and Activ 4D Executive Committee
65. Meurer W, Yeatts S, Silbergleit R et al, for the ICECAP Clinical Trial Investigators. Duration of therapeutic hypothermia after out-of-hospital cardiac arrest: the ICECAP randomized clinical trial. Role: Site Principal Investigator, Hub Principal Investigator. *Submitted, in review*.

### **Peer-Reviewed Conference Publications (Journal Supplements & Proceedings)**

*Entries are peer reviewed and published in indexed journals.*

**Merck LH**, Manley GT, Howlett-Smith H, Calcaterra AM, Wright DW. Clinical heterogeneity in the treatment of traumatic brain injury at Level I trauma centers. *Academic Emergency Medicine*. 2010;17(Suppl 1).

**Merck LH**, Chescheir NC, Hamer RM, Wolfe HM, Smith JK, Gilmore JH. Clinical heterogeneity in the treatment of traumatic brain injury at Level I trauma centers. *Academic Emergency Medicine*. 2010;17(Suppl).

**Merck LH**, Haley LL Jr, Chang SJ, Kilgo PD, Lindon L, Wright DW. Physiologic parameters in goal-directed therapy for traumatic brain injury at a Level I trauma center. *Academic Emergency Medicine*. 2011;18(Suppl 1):S179.

**Merck LH**, Holdsworth M, Keithley J, Houry D, Ward L, Applegate KE, Lowery-North DW, Heilpern KL. Informed consent for computerized tomography via video educational module in the emergency department. *Academic Emergency Medicine*. 2012;19(Suppl 1).

Holdsworth M, Ward L, Lowery-North DW, Heilpern KL, Houry D, Applegate KE, **Merck LH**. When do we order CT to assess abdominal and pelvic pain? A predictive model of computerized tomography utilization in the emergency department. *Annals of Emergency Medicine* 2012; 60(4):S107.

**Merck LH**, Heilpern KL, Houry D, Holdsworth M, Ward L, Applegate KE, Lowery-North DW. Predictors of positive findings in abdominal computerized tomography in the emergency department. *Annals of Emergency Medicine*. 2012;60(4):S49.

Choy T, Holdsworth M, Applegate KE, Houry DE, Merck LH, Lowery-North DW, Heilpern KL, **Merck LH**. Computed tomography utilization patterns for abdominal and pelvic pain in the emergency department. *Annals of Emergency Medicine*. 2012;60(Suppl).

Kaylor JP, Haley LL Jr, Wright DW, Chang SL, **Merck LH**. Electronic medical records and compliance with goal-directed therapy in traumatic brain injury. *Annals of Emergency Medicine*. 2012;60(4):S50.

Kobayashi L, Choi B, Asselin N, Pettit C, Dannecker M, Machan J, **Merck LH**, Suner S, Williams KA, Jay GD. Interim results of randomized simulation testing of automated cardiac arrest resuscitation protocols. *Simulation in Healthcare*. 2014;9(6):417–418.

**Merck LH**, Ward L, Holdsworth M, Houry D, Applegate KE, Lowery-North DW, Heilpern KL. Written informed consent for computerized tomography decreases CT utilization in low-risk emergency department patients. *Academic Emergency Medicine*. 2014;21(Suppl 1):S192.

Siket MS, Silver B, Siegel TA, Paolucci G, Pezzullo JA III, Rogg J, Gibbs FJ, **Merck LH**. Transient neurological symptoms with MRI evidence of infarction in an emergency department observation unit. *Stroke*. 2014;45(Suppl 1).

Frankel M, Yeatts SD, Fan L, Jeromin A, Vos PE, Wagner AK, Lunney M, **Merck LH**, Hall CL, Palesch YY, Silbergleit R, Wright DW. Biomarkers of injury and outcome in the ProTECT III Trial (BIO-PROTECT). *Academic Emergency Medicine*. 2015;22(Suppl).

Madsen TE, **Merck LH**, Siket MS, Paolucci G, Tran MT, Silver B. Sex differences in clinical presentation and outcomes among transient ischemic attack observation unit patients. *Stroke*. 2015;46(Suppl 1):TP217.

Siket MS, Ndon IU, Baird JR, Madsen TE, **Merck LH**, Napoli AM, Paolucci G, Siegel TA, Tran VM, Silver B. Diagnosis and safe discharge of ischemic stroke patients with transient symptoms. *Stroke*. 2015;46(Suppl 1).

Leary OP, Merck D, Collins S, Jung S, Allen JW, Wright DW, **Merck LH**. Goal-directed therapy and outcome after traumatic brain injury: Findings from the ProTECT III Trial. *Journal of Neurotrauma*. 2017;34(Suppl).

★ Top-Scored Abstract, Neurocritical Care Society International Conference.

Leary OP, Merck D, Collins S, Jung S, Allen JW, Wright DW, **Merck LH**. Quantitative computed tomography hemorrhage phenotypes improve outcome prediction following traumatic brain injury. *Journal of Neurotrauma*. 2019;36(Suppl).

Leary OP, Merck D, Collins S, Jung S, Allen JW, Wright DW, **Merck LH**. Outcome prediction with computer-assisted hemorrhage volume estimation in traumatic brain injury. *Critical Care Medicine*. 2019;47(Suppl).

★ Star Research Achievement Award, Society of Critical Care Medicine Critical Care Congress.

Harder TJ, Leary OP, Yang Z, Lucke-Wold B, Liu DD, Allen JW, Wright DW, **Merck LH**. Early signs of elevated intracranial pressure on computed tomography correlate with measured intracranial pressure and six-month outcome after traumatic brain injury. *Critical Care Medicine*. 2020;48(1).

★ Star Research Achievement Award, Society of Critical Care Medicine Critical Care Congress.

Lilova R, Jackson D, Leary OP, Salter A, Haskins W, Wright DW, **Merck LH**. Blood biomarkers are related to isolated diffuse axonal injury and patient outcomes. *Critical Care Medicine*. 2025;53(1).

### **Workshop Proceedings & Federal Publications:**

1. **LH Merck**, quoted in: National Academies of Sciences, Engineering, and Medicine, 2020. Neuroscience data in the cloud: Opportunities and challenges: Proceedings of a workshop. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25653>.
2. **LH Merck**, referenced in: Radiation Safety in Imaging, Best Practices in Health Care, The Joint Commission Perspectives in Patient Safety. May 2011, Vol 11, Issue 5 Joint Commission on Accreditation of Health Care Organizations.

### **Books & Book Chapters:**

1. **Fagan, LH**, Asthma Protocols in an Urban Emergency Department. Thesis, 2002, Oregon Health Sciences University, Dept of Public Health, Preventive Medicine/Mt. Sinai Hospital, Chicago, IL.
2. Wright D, **Merck LH**: Head Trauma in Adults and Children. In Tintinalli JE, Stapczynski JS, Ma OJ, Cline DM, Cydulka R (eds): *Emergency Medicine: A Comprehensive Study Guide*, 7th edition. McGraw- Hill, Inc., 2010.
3. Wright D, **Merck LH**: Head Trauma in Adults and Children. In Tintinalli JE, Stapczynski JS, Ma OJ, Cline DM, Cydulka R (eds): *Tintinalli's Emergency Medicine Manual*, 7th Ed. (Pocket Edition). McGraw-Hill, Inc., 2011.
4. Wright D, **Merck LH**: Head Trauma. In Tintinalli JE, Stapczynski JS, Ma OJ, Cline DM, Cydulka R (eds): *Emergency Medicine: A Comprehensive Study Guide*, 8th edition. McGraw-Hill, Inc. 2015.
5. Wright D, **Merck LH**: Head Trauma. In Tintinalli JE, Stapczynski JS, Ma OJ, Cline DM, Cydulka R (eds): *Emergency Medicine: A Comprehensive Study Guide*, 9th edition. McGraw-Hill Inc. 2019.

**Digital Media Publications:**

1. Edward Walsh, Scott Collins, Owen Leary, Derek Merck, **Lisa Merck**, and Chester Sherwood. Bactrian Camel Brain Imaging. Brown University Digital Repository, 2016. Project Data DOI: <https://doi.org/10.7301/Z00C4SPV>.
2. Ibis Mummy CT Imaging. Merck PhD, Scott Collins RT(R)(CT), **Lisa Merck MD MPH**, Jen Thum MPhil, Julia Troche PhD, Owen Leary, John Cronan MD. This project is a collaboration between Egyptology researchers from the Joukowsky Institute at Brown University and medical imaging researchers at Rhode Island Hospital, to utilize diagnostic imaging techniques to confirm the identity of an unprovenanced 2000-year-old ibis mummy found at an archaeological site in Egypt. This unique application of imaging technology to archaeology research was sought because removing the wrapping from the mummy by hand would have risked damage to the delicate artifact. The study was used to confirm the presence of the mummified ibis inside the wrappings. Brown Digital Repository. Brown University Library. 2017; Project Data DOI: <https://doi.org/10.7301/Z0PZ56R5>
3. Merck, Derek; Collins, Scott; **Merck, Lisa**, Thum Jen; Troche, Julia; Leary, Owen; Cronan, John. Ibis mummy CT imaging: abstract and presentation (2016). *Ibis Mummy CT Imaging*. Brown Digital Repository. Brown University Library. <https://doi.org/10.7301/Z0PZ56R5>; <https://repository.library.brown.edu/studio/item/bdr:697318/>
4. Rashleigh, Edward Patrick; Merck, Derek; Collins, Scott; **Merck, Lisa**; Thum Jen; Troche, Julia; Leary, Owen; Cronan, John. 3D print of the ibis mummy skeleton with supports (2017). *Ibis Mummy CT Imaging, Browniverse: 3D Models and Printing Digital Library*. Brown Digital Repository. Brown University Library. <https://repository.library.brown.edu/studio/item/bdr:69809/>
5. Derek Merck PhD, Scott Collins RT(R)(CT), **Lisa Merck MD MPH**, Jen Thum MPhil, Julia Troche PhD, Owen Leary, John Cronan MD. (2016). Ibis mummy CT imaging: 3D slicer files (2016). *Ibis Mummy CT Imaging, Browniverse: 3D Models and Printing Digital Library*. Brown Digital Repository. Brown University Library. <https://doi.org/10.7301/Z0PZ56R5>; <https://repository.library.brown.edu/studio/item/bdr:697315/>
6. Merck, Derek; Collins, Scott; **Merck, Lisa**, Thum Jen; Troche, Julia; Leary, Owen; Cronan, John. Ibis mummy CT imaging: CT scan 1 (2016). *Ibis Mummy CT Imaging*. Brown Digital Repository. Brown University Library. <https://doi.org/10.7301/Z0PZ56R5>; <https://repository.library.brown.edu/studio/item/bdr:697313/>
7. Merck, Derek; Collins, Scott; **Merck, Lisa**, Thum Jen; Troche, Julia; Leary, Owen; Cronan, John. Ibis mummy CT imaging: CT scan 2 (2016). *Ibis Mummy CT Imaging*. Brown Digital Repository. Brown University Library. <https://doi.org/10.7301/Z0PZ56R5>; <https://repository.library.brown.edu/studio/item/bdr:697314/>
8. Merck, Derek; Collins, Scott; **Merck, Lisa**, Thum Jen; Troche, Julia; Leary, Owen; Cronan, John. Ibis mummy CT imaging: STL files (2016). *Ibis Mummy CT Imaging, Browniverse: 3D Models and Printing Digital Library*. Brown Digital Repository. Brown University Library. <https://doi.org/10.7301/Z0PZ56R5>; <https://repository.library.brown.edu/studio/item/bdr:697316/>
9. Merck, Derek; Collins, Scott; **Merck, Lisa**, Thum Jen; Troche, Julia; Leary, Owen; Cronan, John. Ibis mummy CT imaging: temporal bone comparison (2016). *Ibis Mummy CT Imaging*. Brown Digital Repository. Brown University Library. <https://doi.org/10.7301/Z0PZ56R5>; <https://repository.library.brown.edu/studio/item/bdr:697317/>

10. Journal Club, Society of Critical Care Medicine. The Effect of Goal Directed Therapy on Patient Morbidity and Mortality after Traumatic Brain Injury, Results from the ProTECTIII Clinical Trial. **Merck, Lisa H** Webinar 5/23/2019.

### **Scholarly Work Published in other Media:**

**Web:** <http://www.accessem.com/textbooks.aspx> Wright D, Merck LH: Head Trauma in Adults and Children. In Tintinalli JE, Stapczynski JS, Ma OJ, Cline DM, Cydulka R (eds) McGraw-Hill, Inc., 2010.

**Video:** Informed Consent for Computerized Tomography, Video. Written and directed by: Lisa H. Merck MD, MPH, produced by: Burton Fox, MS. Emory University, 2011.

### **INVITED PRESENTATIONS:**

1. 2001 Frim DM, **Fagan LH**. Pseudotumor Cerebri associated with treatment for Chiari Malformation Type I. Joint Section on Pediatric Neurosurgery of the American Association of Neurological Surgery and the Congress of Neurological Surgeons, November 2001, New York, New York.
2. 2005 Looney CB, Smith JK, **Fagan LH**, Hamer RM, Gilmore JH. Intracranial hemorrhage in asymptomatic neonates: prevalence on 3.0 T MR scans and relationship to obstetric and neonatal risk factors. Radiologic Society of North America, November 2005, Chicago, Illinois.
3. 2008 Biese K, Mehrotra A, Cook J, **Merck L**, Page B. Emergency Department Crowding Increases Acquisition Time of Brain CT and ECG. Society for Academic Emergency Medicine, June 2008, Washington D.C.
4. 2010 Clinical Heterogeneity in the Treatment of Traumatic Brain Injury at Level I Trauma Centers. **Lisa H Merck MD, MPH**, Geoffrey T Manley MD, PhD, Harriet Howlett-Smith RN, CCRC, Anna Marie Calcaterra and David W Wright MD. Society for Academic Emergency Medicine - National Annual Meeting, May 2010, Phoenix, Arizona.
5. 2011 Physiologic Parameters in Goal Directed Therapy for Traumatic Brain Injury at a Level I Trauma Center. **Lisa H Merck MD MPH**, Leon L Haley Jr MD MHSA, Samuel J Chang BS, Patrick D Kilgo MS, Lovette Lindon PhD, David W Wright MD. Society for Academic Emergency Medicine- National Meeting, May 2011, Boston, Massachusetts.
6. 2012 Predictors of Positive Findings in Abdominal Computerized Tomography in the Emergency Department. **Lisa H Merck MD MPH**, Kate Heilpern MD, Debra Houry MD MPH, Michael Holdsworth MD, Laura A Ward MSPH, Kimberly Applegate MD MS, Douglas W Lowery-North MD MSPH. American College of Emergency Physicians, National Annual Meeting, October 2012, Denver, Colorado.
7. 2012 When Do We Order CT to Assess Abdominal and Pelvic Pain? A Predictive Model of Computerized Tomography Utilization in the Emergency Department. Michael Holdsworth MD, Laura A Ward MSPH, Douglas W Lowery-North MD MSPH, Kate Heilpern MD, Debra Houry MD MPH, Kimberly E Applegate MD MSPH, **Lisa H Merck MD MPH**. American College of Emergency Physicians, National Annual Meeting, October 2012, Denver, Colorado.

8. 2012 Informed Consent for Computerized Tomography via Video Educational Module in the Emergency Department. **Lisa H Merck MD MPH**, Michael Holdsworth BS BA, Joshua Keithley BS, Debra Houry MD MPH, Laura A Ward MSPH, Kimberly E Applegate MD MSPH, Douglas W Lowery-North MD MSPH, Kate Heilpern MD FACEP. Society for Academic Emergency Medicine National Annual Meeting, May 2012, Chicago, Illinois.
9. 2012 Electronic Medical Records and Compliance with Goal-Directed Therapy in Traumatic Brain Injury. Jordan P Kaylor MD, Leon L Haley MD MHSA, David W Wright MD, Samuel L Chang MD, **Lisa H Merck**. American College of Emergency Physicians, National Annual Meeting, October 2012, Denver, Colorado.
10. 2014 Transient Neurological Symptoms with MRI Evidence of Infarction in an Emergency Department Observation Unit (EDOU). Matthew S Siket, Brian Silver, Todd A Seigel, Gino Paolucci, John A Pezzullo III, Jeffrey Rogg, Frantz J Gibbs, **Lisa H Merck**. International Stroke Conference, February 2014, San Diego, California.
11. 2014 Implementation of a Magnetic Resonance Imaging Protocol for Patients with Transient Ischemic Attack in an Emergency Department Observation Unit. Matthew Siket, Todd Siegel, Gino Paolucci, **Lisa Merck**, Frantz Gibbs, John Pezullo III, Jeffrey Rogg, Brian Silver. Society for Academic Emergency Medicine National Annual Meeting, May 2014, Dallas, Texas.
12. 2014 Written Informed Consent for Computerized Tomography Decreases CT Utilization in Low Risk Emergency Department Patients. **Lisa H Merck**, Laura Ward, Michael Holdsworth, Debra Houry, Kimberly Applegate, Douglas Lowery-North, Katherine Heilpern. Society for Academic Emergency Medicine National Annual Meeting, May 2014, Dallas, Texas.
13. 2014 Written Informed Consent for Computerized Tomography Decreases CT Utilization in Low-Risk Emergency Department Patients. **Lisa H Merck**, Laura Ward, Michael Holdsworth, Debra Houry, Kimberly Applegate, Douglas Lowery-North, Katherine Heilpern. New England, Society for Academic Emergency Medicine Regional Conference Yale University, March 2014, New Haven, Connecticut.
14. 2014 Implementation of a Magnetic Resonance Imaging Protocol for Patients with Transient Ischemic Attack in an Emergency Department Observation Unit. Matthew Siket, Todd Siegel, Gino Paolucci, **Lisa Merck**, Frantz Gibbs, John Pezullo III, Jeffrey Rogg, Brian Silver. Society for Academic Emergency Medicine Regional Conference Yale University, March 2014, New Haven, Connecticut.
15. 2015 Biomarkers of Injury and Outcome In Protect III (BIO-ProTECT). Michael Frankel, Sharon D. Yeatts, Liqiong Fan, Andreas Jeromin, Pieter E. Vos, Amy K. Wagner, Harriet Smith, Bethany Lane, Michael Lunney, Casey L Hall, **Lisa H Merck**, Yuko Y Palesch, Robert Silbergleit, David W Wright. Society for Academic Emergency Medicine, May 2015, San Diego, California.
16. 2015 The Diagnosis, Etiologic Classification, and Safe Discharge of Ischemic Strokes with Transient Symptoms from an Emergency Department Observation Unit. Matthew S Siket, Idara U Ndon, Janette R Baird, Tracy E Madsen, **Lisa H Merck**, Anthony M Napoli, Gino Paolucci, Todd A Seigel, Virginia M Tran, Brian Silver. International Stroke Conference, February 2015, Nashville, Tennessee.
17. 2015 Sex Differences in Clinical Presentation and Outcome: Patients Admitted to a Transient Ischemic Attack Emergency Department Observation Unit. Tracy E Madsen, **Lisa H Merck**, Matthew S

- Siket, Gino Paolucci, My T Tran, Brian Silver. International Stroke Conference, February 2015, Nashville, Tennessee.
18. 2015 Clinical Predictors of Stroke, TIA and Mimic among Patients with Transient Neurological Dysfunction Admitted to an Emergency Department Observation Unit. Matthew S Siket, Virginia M Tran, Janette R Baird, Tracy E Madsen, **Lisa H Merck**, Anthony M Napoli, Gino Paolucci, Todd A Seigel, Brian Silver. International Stroke Conference, February 2015, Nashville, Tennessee.
  19. 2015 Choi B, Asselin N, Pettit CC, Dannecker M, Jones MS, **Merck L**, Suner S, Williams K, Jay GD, Kobayashi L. Interim results of randomized controlled simulation testing of standard and automated device-assisted pre-hospital cardiac arrest resuscitation approaches. Presentation at the International Meeting on Simulation in Healthcare, January 2015, New Orleans, Louisiana.
  20. 2016 Frim DM, Boyle T, Zorc J, Hickey R, Leonard J, Neuman M, Chamberlain J, Heuer G, Boop R, Sandberg D, Mandeep T, Klinge P, **Merck L**, Keating R, Leonard J, Piatt J, Bennett J, Chesler D, Hameed M, Anor T, Fritz F, Madsen J. Thermal Flow Detection Improves Diagnostic Accuracy of Shunt Malfunction: Prospective, Multicenter, Operator-Blinded Study. Accepted for presentation as a plenary session; American Association of Neurological Surgery Annual Scientific Meeting; April 2016, Chicago, Illinois.
  21. 2016 **Lisa H Merck MD MPH**, David W Wright MD, Owen Leary, Michael P Lunney MPH NRP, Scott Collins RT(R)(CT), Jason Allen MD PhD, Sharon Yeatts PhD, Derek Merck PhD. Case Series: 3D Image Analysis in Traumatic Brain Injury. Radiologic Society of North America; December 2016, Chicago, IL.
  22. 2017 Krishna Murthy, Owen Leary, **Lisa H Merck**, Benjamin Kimia, Scott Collins, David W Wright, Jason W Allen, Derek Merck. Machine learning algorithm for automatic detection of CT-identifiable hyperdense lesions associated with traumatic brain injury. The International Society for Optics and Photonics (SPIE); February 2017, Orlando FL.
  23. 2017 Tehnaz Boyle, Joseph Madsen, Mark Neuman, Mandeep Tamber, Robert W. Hickey, Gregory Heuer, Jeffrey Leonard, Julie C. Leonard, Robert Keating, James Chamberlain, David Frim, Paula Zakrzewski, Petra Klinge, **Lisa Merck**, Joseph Piatt, Jonathon Bennett, David Sandberg, Frederick Boop, Joseph Zorc. ShuntCheck versus Neuroimaging for Diagnosing Ventricular Shunt Malfunction in the Emergency Department. Pediatric Academic Societies meeting; May 2017, San Francisco, CA.
  24. 2017 Owen Leary\*, **Lisa H Merck MD MPH\***, David W Wright MD, Maria Braileanu MD, Scott Collins RT(R)(CT), Jason W Allen MD PhD, Sharon Yeatts PhD, Derek Merck PhD. 3D Illustration to Quantify Volume of Traumatic Intraparenchymal Hemorrhage. \*Lisa H Merck is supervising first author. World Intracranial Hemorrhage Conference; Baltimore Maryland, May 2017.
  25. 2017 Kobayashi L, Collins S, **Merck LH**, Merck DL. Exploratory Applications of Augmented Reality for Patient Education in Emergency Medicine. Society for Academic Emergency Medicine, National Conference; Orlando, Florida, May 2017.
  26. 2017 Derek Merck PhD, David W Wright MD, Owen Leary, Sean O'Donnell, Scott Moody, Maria Braileanu MD, Scott Collins RT(R)(CT), Jason W Allen MD PhD, Kurt R Denninghoff MD, Sharon Yeatts PhD, **Lisa H Merck MD MPH**. 3D Illustration Offers a More Precise Method to

- Quantify Bleed Volume after Traumatic Brain Injury when Compared to Standard Methods. Society for Academic Emergency Medicine, New England Research Directors Regional Conference; Worcester, MA. April 2017.
27. 2017 Kurt Denninghoff, Tomas Nuño, Qi Pauls, Sharon D Yeatts, Robert Silbergleit, Yuko Y Palesch, **Lisa H Merck**, Geoff Manley, and David W Wright. Pre-hospital intubation is associated with favorable outcomes and lower mortality in ProTECTIII Trial. Society for Academic Emergency Medicine, Western Regional Conference; Stanford, CA. April 2017.
  28. 2017 Kurt Denninghoff, Tomas Nuño, Qi Pauls, Sharon D Yeatts, Robert Silbergleit, Yuko Y Palesch, **Lisa H Merck**, Geoff Manley, and David W Wright. Pre-hospital intubation is associated with favorable outcomes and lower mortality in ProTECTIII Trial. Society for Academic Emergency Medicine, National Conference; Orlando, Florida. May 2017.
  29. 2017 Keshavamurthy, Krishna Nand, Owen Leary, **Lisa H Merck**, Benjamin Kimia, Scott Collins, David W Wright, Jason Allen, and Derek Merck. Machine Learning Algorithm for Automatic Detection of CT-Identifiable Hyperdense Lesions Associated with Traumatic Brain Injury. Poster presentation, Mind/Brain Research Day, Brown University, Providence, RI, March 2017.
  30. 2017 Leary, Owen\*, **Lisa Merck\***, David Wright, Maria Braileanu, Scott Collins, Jason Allen, Sharon Yeatts, and Derek Merck. 3D Illustration to Quantify Volume of Traumatic Intraparenchymal Hemorrhage. Poster presentation, Mind/Brain Research Day, Brown University, Providence, RI, March 2017. \*supervising first author
  31. 2017 Derek Merck PhD, David W Wright MD, Owen Leary, Maria Braileanu MD, Scott Collins RT(R)(CT), Jason W Allen MD PhD, Sharon D Yeatts PhD, **Lisa H Merck MD MPH**. 3D Illustration to Quantify Volume of Subdural and Epidural Hematomas. Neurocritical Care Society, International Conference: Kona, Hawaii, October 2017.
  32. 2017 **Lisa H Merck MD MPH**, Sharon D Yeatts PhD, Geoff Manley MD PhD, Robert Silbergleit MD, Robin Conwit MD, Qi Pauls MS, Michael Frankel MD, Peter Le Roux MD, Yuko Palesch PhD, David W Wright MD. Goal Directed Therapy in the ProTECTIII Clinical Trial: The Effect of Physiologic Transgressions on Patient Mortality after Traumatic Brain Injury. Neurocritical Care Society, International Conference: Kona, Hawaii, October 2017
  33. 2017 **Lisa H Merck MD MPH**, Sharon D Yeatts PhD, Geoff Manley MD PhD, Robert Silbergleit MD, Robin Conwit MD, Qi Pauls MS, Michael Frankel MD, Peter Le Roux MD, Yuko Palesch PhD, David W Wright MD. Goal Directed Therapy in the ProTECTIII Clinical Trial: The Effect of Physiologic Transgressions on Patient Functional Outcome after Traumatic Brain Injury. Neurocritical Care Society, International Conference: Kona, Hawaii, October 2017.
  34. 2018 Owen P Leary, Sharon Yeatts, Casey Poore, David W Wright, Jason W Allen, Qi Pauls, **Lisa H Merck**. Progesterone Therapy & Clinical Outcomes in Diffuse Axonal Injury: A Retrospective Analysis of Data from the ProTECTIII Trial. NeuroTrauma, The 3<sup>rd</sup> Joint Symposium of the International and National Neurotrauma Societies and American Association of Neurological Surgery / Congress of Neurological Surgeons Section on Neurotrauma and Critical Care. Toronto, Canada, August 2018.
  35. 2018 Tomas Nuño, PhD, Kurt Denninghoff, MD, **Lisa Merck, MD MPH**, Qi Pauls, MS, Sharon Yeatts, PhD, Yuko Palesch, PhD, Robert Silbergleit, MD, Geoffrey Manley, MD PhD, and David Wright, MD. Racial/ethnic minority participation in clinical research: Assessment of Exception

from Informed Consent in ProTECT III. American Public Health Association, San Diego, CA, November 2018.

36. 2018 Ian Pan, Owen Leary, Stefan Jung, Krishna Nand Keshavamurthy, Jason Allen, David Wright, **Lisa H Merck**, and Derek Merck. Deep Learning for Automatic Detection and Segmentation of Acute Epidural and Subdural Hematomas in Head CT. Abstract / Research presentation, Radiological Association of North America (RSNA), Chicago, IL, November 2018.
37. 2019 The Relationship Between Magnitude of International Normalized Ratio and Outcome After Traumatic Brain Injury. Fiona Chen; Qi Pauls, MS; Sharon D Yeatts, PhD; David W Wright, MD; Rie Calcaterra; **Lisa H Merck, MD MPH**. Society for Academic Emergency Medicine, National Conference; Las Vegas, Nevada. May 2019.
38. 2019 The Relationship Between Magnitude of International Normalized Ratio and Outcome After Traumatic Brain Injury. Fiona Chen; Qi Pauls, MS; Sharon D Yeatts, PhD; David W Wright, MD; Rie Calcaterra; **Lisa H Merck, MD MPH**. New England Regional Meeting of the Society for Academic Emergency Medicine, Worcester, MA, 3/2019.
39. 2019 Efficacy of Computed Tomography Use in Assessing Traumatic Brain Injury in Adult and Pediatric Patients. Taneisha Wilson, **Lisa H Merck**, Marc Zonfrillo, John Movson, Derek Merck. New England Regional Meeting of the Society for Academic Emergency Medicine, Worcester, MA, 3/2019.
40. 2019 Volume of Subdural and Epidural Hematoma Measured by Computer-Assisted Estimation is More Predictive of Patient Mortality and Functional Disability than ABC/2. Owen P Leary, Tyler J Harder, Ian Pan, Derek Merck, David W Wright, **Lisa H Merck**. *Invitation to present at the National Neurotrauma Symposium / American Association of Neurological Surgery / Congress of Neurological Surgery Joint Section on Neurotrauma and Critical Care*, Pittsburgh, PA 7/2019.
41. 2019 The Relationship Between Magnitude of International Normalized Ratio and Outcome After Traumatic Brain Injury. Fiona Chen; Qi Pauls, MS; Sharon D Yeatts, PhD; David W Wright MD; Rie Calcaterra; **Lisa H Merck, MD MPH**. Brown Emergency Medicine Symposium, Providence, RI 5/2019.
42. 2019 Volume of Subdural Hematoma and Epidural Hematoma Measured by Computer-Assisted Estimation Is More Predictive of Mortality and Functional Disability than ABC/2. Owen P Leary, Tyler J Harder, Ian Pan, Derek Merck, David W Wright, **Lisa H Merck**. National Neurotrauma Society, Pittsburgh, PA. 2019 Trainee Competition Winner “Best Poster on Cranial Trauma” from the AANS/CNS Joint Section on Trauma and Critical Care.
43. 2019 Promotion of Gender and Under Represented Minority Inclusivity in Translational Research for Acute Neurological Disorders. Alexis N Simpkins, MD PhD, MSCR; **Lisa H Merck MD MPH FACEP** Katharina Busl MD MS; Carolina Maciel MD MSCR. Association of American Medical Colleges Annual Meeting Phoenix Arizona 9/2019.
44. 2020 A Comparative Study of 2D Image Segmentation Algorithms for Traumatic Brain Lesions Using CT Data from the ProTECTIII Multicenter Clinical Trial. Shruti Jadon BS, Owen P Leary ScB, Ian Pan MS, Tyler J Harder MS, David W Wright MD, **Lisa H Merck MD MPH**, Derek L Merck PhD. *Oral presentation*, The International Society for Optics and Photonics (SPIE), Houston, TX

45. 2020 T Yi, I Pan, F Chen, R Cueto, S Collins, J Smith, H Bai, D Merck, **L Merck**. Identification of Intracranial Hemorrhage Using an Original Artificial Intelligence System. New England Research Directors Regional Meeting 2020, Worcester, MA.
46. 2020 Leary O, Harder T, Liu D, Jung Stefan, Braileanu M, Allen J, Merck D, Wright D, **Merck L**: Outcome Prediction With Computer-Assisted Volumetry and ABC/2 in Traumatic Intra-Axial Hemorrhage. Presented as abstract no. 39 at the 2020 Society of Critical Care Medicine Critical Care Congress in Orlando, FL. Published: Crit Care Med 2020: 48(1): 20.
47. 2020 Harder T, Leary O, Liu D, Merck D, Wright D, **Merck L**: Patient-Specific Prognostication After TBI Is Related to Bleed Phenotype and Anatomic Location. Presented as abstract no. 40 at the 2020 Society of Critical Care Medicine Critical Care Congress in Orlando, FL. Published: Crit Care Med 2020: 48(1): 20.
48. 2021 Tyler J Harder, Owen P Leary, David Liu, Derek Merck, David W Wright, **Lisa H Merck**. Distinct Radiographic Phenotypes of Elevated Intracranial Pressure on Non-Contrast Head CT Predict Mortality and Functional Outcome in Moderate-to-Severe TBI North Central Florida Society for Neuroscience, Regional Meeting 2021, Gainesville FL.
49. 2021 Deployment of Novel SARS-CoV-2 Testing in First Responders, Front Line Providers, and Essential Personnel During the COVID-19 Pandemic. C Montero, M Balakrishnan, J Loeb, R. Cueto, MT Long, J Lednicky, DAT Cummings, J Morris, K Cherabuddi, A Tyndall, **LH Merck**. EPI Research Day, Virtual Conference, University of Florida.
50. 2021 Perception of access to personal protective equipment in first responders and essential workers across North Florida. J Antoine, A Zeinomar, M Beck, M Solly, C Montero, M Balakrishnan, M Chowdhury, K Cherabuddi, J Morris, A Tyndall, **LH Merck**. American Public Health Association, October, 2021 Denver CO.
51. 2021 Epidemiology of SARS-CoV-2 in First Responders and Essential Personnel across North Florida. M Balakrishnan, C Montero, J Loeb, M Chowdhury, M Solly, MT Long, L Bryan, J Lednicky, DAT Cummings, J Morris, K Cherabuddi, A Tyndall, **LH Merck**. American Public Health Association, October 2021 Denver, CO.
52. 2022 Association of Craniotomy, Decompressive Hemicraniectomy, and External Ventricular Drain (EVD) Placement with Patient Mortality and 6-Month Functional Outcome Following Moderate to Severe TBI: Secondary Analysis of the ProTECTIII Dataset. Leary O, Harder T, Yang Z, Lucke-Wold B, Still M, Zhang M, Yeatts S, Wright D, Merck D, **Merck L**. June 2022 Atlanta, GA, National Neurotrauma Society and AANS/CNS Joint Section on Neurotrauma and Critical Care.
53. 2024 A Highly Scalable & Cost-Effective Sampling & Testing Solution for Brain Health & Injury. Devin Jackson, James Meabon, Elizabeth Colasurdo, Kristy Radeker, Anthony Adelizza, Katie Tehas, Ava Puccio, Raquel Gardner, John Williamson, Owen Leary, Tyler Harder, Radina L Lilova, **Lisa H Merck**, Amber Salter, Jeff Illiff, Elaine Peskind, Kevin Wang, and William Haskins. June 2024 San Francisco, CA, National Neurotrauma Society Symposium and American Association of Neurological Surgeons/CNS Joint Section on Neurotrauma & Critical Care.
54. 2024 Association of diffuse axonal injury with outcome in moderate to severe traumatic brain injury patients. Radina L Lilova, Owen P Leary, Tyler J Harder, David W Wright, and **Lisa H Merck**. Presentation, Sept 2024, International Neurotrauma Society, Cambridge, UK.

55. 2024 Association of diffuse axonal injury with outcome in moderate to severe traumatic brain injury patients. Radina L Lilova, Owen P Leary, Tyler J Harder, David W Wright, and **Lisa H Merck**. Presentation, Oct 2024, Neurocritical Care Society, San Diego, CA.
56. 2024 Novel Blood Biomarkers of Diffuse Axonal Injury in Moderate-Severe Traumatic Brain Injury Patients. Radina L. Lilova BS, Devin Jackson PhD, Katie Tehas BS, Owen P. Leary BS, Tyler J. Harder MD MS, David W. Wright MD, Amber Salter PhD, William Haskins PhD, **Lisa H. Merck MD MPH**. Late-breaking presentation, Oct 2024, Neurocritical Care Society, San Diego, CA.
57. 2025 Blood Biomarkers are Related to Isolated Diffuse Axonal Injury and Patient Outcomes. Radina L Lilova BS; Devin Jackson PhD; Owen P Leary, BS; Tyler J Harder, MD MS; Katie Tehas, BS; David W Wright MD; Amber Salter PhD; William Haskins, PhD; **Lisa H Merck MD MPH**. Feb 2025, Society for Critical Care Medicine, Critical Care Congress, Orlando, FL.
58. 2025 The Highlights and Hiccups of High-Density Data. Johnathan Beall, Sharon Yeatts, Ezekiel Lowelle, Jean-Christopher Arnaud, **Lisa H. Merck**. Society for Clinical Trials 2025 Annual Meeting, May 18-21 Vancouver, British Columbia, Canada.
59. 2025 Value of TriNetX national database to inform characteristics of observation patients assessed for acute syncope. Sreedhatri Kandlakunta BS, **Lisa H. Merck MD MPH**, Megan Donohue MD MPH. Association for Clinical and Translational Science, Translational Science 2025, April 16, Washington, DC.
60. 2025 Diabetic Ketoacidosis Patients Under Observation: Comparing Discharged and Admitted Patients Using TriNetX. Nancy Marie C. Beinlich BS, **Lisa H. Merck MD MPH**, Megan P. Donohue MD MPH. Society for Academic Emergency Medicine, Philadelphia, PA, May 2025.
61. 2025 Comparative Analysis of Clinical Presentation in Ovarian Torsion and Ruptured or Hemorrhagic Ovarian Cyst: Implications for Diagnosis and Timely Management. Joanna Le Galloudec BS, Michael Keller BS, Nancy Beinlich BS, Megan Donohue MD MPH, **Lisa H Merck MD MPH** Medical Student Research Day, Virginia Commonwealth University, Richmond, VA May 2025
62. 2025 Rhythm Trends in Out-of-Hospital Cardiac Arrest. Nancy Beinlich BS, Nikhil Chandravel BS BA, Michael Keller BS, Dylan Kelley MS, Jessica Rosner MPH, **Lisa Merck MD MPH**, Megan Donohue MD MPH. Medical Student Research Day, Virginia Commonwealth University, Richmond, VA May 2025
63. 2025 Comparison of Capillary Blood to Venous Plasma Biomarkers in Longitudinal TBI Clinical Studies Devin Jackson, James Meabon, Elizabeth Colasurdo, Kristy Radeker, Anthony DeLizza, Katie Tehas, Ava Puccio, Raquel Gardner, John Williamson, **Lisa H. Merck**, Amber Salter, Jeffrey Illiff, Elaine Peskind, Geoff Manley, Kevin Wang, and William Haskins. *Accepted for presentation*, Military Health System Research Symposium (MHSRS), Kissimmee, FL August 2025
64. 2026 Comparative Analysis of Clinical and Ultrasound Features Distinguishing Ovarian Torsion From Ruptured or Hemorrhagic Ovarian Cysts. Joanna Le Galloudec BS, Michael Keller BS, Nancy Beinlich BS, Megan Donohue MD, MPH, **Lisa H Merck MD, MPH**. *Accepted for presentation*, SAEM Atlanta, GA May 2026.

**SEMINARS & LECTURES:****International:**

Journal Club, *Society for Critical Care Medicine*. **Lisa H Merck MD MPH FACEP**, “The Effect of Goal Directed Therapy on Patient Morbidity and Mortality after Traumatic Brain Injury, Results from the ProTECTIII Clinical Trial,” with Tamas Szakmany MD PhD EDIC DESA, moderator. *Critical Care Medicine Webinar* 5/23/2019.

The Highlights and Hiccups of High-Density Data. Johnathan Beall, Sharon Yeatts, Ezekiel Lowelle, Jean-Christopher Arnaud, **Lisa H. Merck**. Society for Clinical Trials 2025 Annual Meeting, May 18-21 Vancouver, British Columbia, Canada.

**National:**

1. 2011 Decompressive Craniectomy in Diffuse Traumatic Brain Injury. Neurological Emergencies Treatment Trial Network, National Tele-conference/Journal Club.
2. 2014 Gender Differences in Neurological Emergencies: A Consensus Summary and Research Agenda on Traumatic Brain Injury. Gender-Specific Research in Emergency Care: Investigate, Understand, and Translate How Gender Affects Patient Outcomes. Society for Academic Emergency Medicine, National Consensus Conference, May 2015, Dallas, Texas, Lisa H Merck MD MPH and NETT investigators.
3. 2014 Cognitive Function and Traumatic Brain Injury. Neurological Emergencies Treatment Trial Network, Journal Club, national tele-conference.
4. 2014 Progesterone in the Treatment of Acute Traumatic Brain Injury. David W Wright, MD, Sharon D Yeatts, PhD, Robert Silbergleit, MD, Yuko Y Palesch, PhD, Vicki S Hertzberg, PhD, Michael Frankel, MD, Harriet Howlett-Smith, RN, Erin M Bengelink, MA, Geoff Manley, MD, PhD, Lisa H Merck, MD MPH, Scott Janis, PhD, William Barsan, MD. Results of the ProTECTIII clinical trial, presented at the Neurocritical Care Society National Conference, September 2014, Seattle, WA
5. 2015 Automated Ventricular Analysis. American Academy of Neurology-National Institute for Neurological Disorders and Stroke. Clinical Trials Methodology Cohort, April 2015, Washington DC.
6. 2015 The STITCH (TRAUMA) trial - Surgery for Traumatic Intracranial Hemorrhage. Neurological Emergencies Treatment Trial Network, Journal Club, national tele-conference, September 2015.
7. 2018 University of Florida, Department of Emergency Medicine Grand Rounds. Traumatic Brain Injury: Special Considerations in Clinical Research. Sept. 13<sup>th</sup>, 2018. The Shands Auxillary Conference Center, University of Florida, Gainesville, Florida.
8. 2019 Clearing Up the Confusion: Emergency Department Management of Glasgow Coma Score 15 Brain Bleeds. Invited Didactic Session, Society for Academic Emergency Medicine; May 17, 2019, Las Vegas, Nevada.

9. 2019 Brain Oxygen Optimization in Severe TBI, Phase 3 Clinical Standardization Team Training for the SIREN Network. Lisa H Merck MD MPH and Lori Shutter MD FNCS FCCM for the BOOST3 CST, March 20, 2019, Atlanta, GA.
10. 2019 Looking into the Future: Unanswered Questions for Future Research and Collaboration. June 11, 2019. Neurotherapeutics Symposium, University of Rochester, Rochester, NY
11. 2019 Young Investigator Session, Facilitator. Neurotherapeutics Symposium, University of Rochester, Rochester, NY. June 11, 2019.
12. 2020 Clinical Imaging and Data Research Repository (CIDRR) consortium meeting. University of Florida, 1, 2020. Gainesville, Florida.
13. 2021 Special Considerations in Traumatic Brain Injury. Grand Rounds, Virginia Commonwealth University, Richmond, VA. October 10, 2021.
14. 2023 Seminar Director and Faculty, NIH SIREN Research Fellow Didactic National Lecture Series (monthly occurrence)
15. 2023 CFR 50.24 Exception from Informed Consent, lecture to the NIH SIREN Research Fellow Didactic National Lecture Series.

**Regional:**

1. 2009 Traumatic Brain Injury, An Overview. Lecture, Georgia College of Emergency Physicians, Regional Annual Meeting, June 2009, Hilton Head, South Carolina.
2. 2010 Clinical Heterogeneity in the Treatment of Traumatic Brain Injury at Level I Trauma Centers. Plenary Session, Southeastern Society for Academic Emergency Medicine, Feb 2010, Birmingham, Alabama.
3. 2020 T Yi, I Pan, F Chen, R Cueto, S Collins, J Smith, H Bai, D Merck, **L Merck**. Identification of Intracranial Hemorrhage Using an Original Artificial Intelligence System. New England Research Directors Regional Meeting 2020, Worcester, MA.
4. 2020 Florida Medical School Virtual Research Symposium. Epidemiology of COVID-19 in First Responders & Front-Line Providers. **Lisa H Merck MD MPH**, J Glenn Morris MD MPH & TM, Derek Merck PhD, Julia Gibson BS, Cindy Montero MS, John Lednický PhD, Maha El Badry PhD, Tara Sabo-Attwood PhD, Joseph H Bisesi PhD, Anthony T Maurelli PhD, Christopher P Barnes AA, Philip Chase BSME, Kevin S Hanson Med, Nicole Iovine MD PhD, Kartik Cherabuddi MD, Adrian Tyndall MD MPH. 6/10/20, Virtual Symposium.
5. 2023 TBI Management and the BOOST3 Clinical Trial (NALS/Trauma), EMS Continuing Education Virtual Instructor Lead Training, State of Virginia.
6. 2024 Approaches to TBI: BLS/ALS/ATLS. EMS Continuing Education Virtual Instructor Lead Training, State of Virginia.

**Local:**

1. 2000 Chiari malformation. Neurological Surgery Conference, Oregon Health and Sciences University, Portland, Oregon.
2. 2001 Chiari malformation. Neurological Surgery Conference, University of Chicago, Chicago, Illinois.
3. 2002 Compliance with Asthma Protocols in an Urban Emergency Department. Thesis Defense, Oregon Health Sciences University, Portland, Oregon.
4. 2004 Spinal Injury. Neurological Surgery Resident Lecture, Duke University Medical Center, Durham, North Carolina.
5. 2006 Approach to Lumbar Puncture. Lecture for Medical Students in Emergency Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
6. 2006 Approach to Central Line Placement. Lecture/Laboratory for Medical Students in Emergency Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
7. 2006 Management of Stroke. Medical Student Teaching Lecture, Department of Emergency Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
8. 2006 Perinatal Seizure. Joint Pediatric Intensive Care and Emergency Medicine Conference, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
9. 2006 Diagnosis and Initial Management of Traumatic Spinal Injury. Emergency Medicine Resident Lecture, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
10. 2007 Steroid Therapy in Spinal Cord Injury. Joint Emergency Department and Trauma Surgery Conference. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
11. 2007 Ectopic Pregnancy. Joint Obstetrics and Emergency Medicine Conference. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
12. 2007 Wound Management. Medical Student Lecture/Laboratory, Department of Emergency Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
13. 2007 Trauma in the Emergency Department. Lecture for Medical Students in Emergency Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
14. 2007 The Interpretation of Chest Radiographs. Lecture for Medical Students in Emergency Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
15. 2008 Neurovascular Emergencies. Emergency Medicine Department, Grand Rounds Lecture. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
16. 2010 Neurological Exam and Signs of Increased Intracranial Pressure in Adults and Children. Emergency Medicine Resident Lecture, Emory University, Atlanta, Georgia.

17. 2010      Neuroradiology for the Emergency Physician. Emergency Medicine Resident Lecture, Emory University, Atlanta, Georgia.
18. 2010      Anatomy of the Spine, Anatomy of Spine Trauma, and Steroids in Spinal Cord Injury. Emergency Medicine Resident Lecture, Emory University, Atlanta, Georgia.
19. 2010      Narrative and Reflection in Clinical Medicine. Emergency Medicine Resident Lecture and Small Group Conference, Emory University, Atlanta, Georgia.
20. 2010      Clinical Heterogeneity in the Treatment of Traumatic Brain Injury at Level I Trauma Centers. Emergency Medicine Resident Lecture, Emory University, Atlanta, Georgia.
21. 2011      Introduction to Neurological Emergencies, Increased Intracranial Pressure, and Neuroradiology in Adults and Children. Emergency Medicine Resident Lecture, Emory University, Atlanta, Georgia.
22. 2011      Informed Consent for Computerized Tomography. Abstract presentation, Emory Health Care Quality Conference, Emory University, Atlanta, Georgia.
23. 2011      Treatment of Neurological Emergencies. Emergency Department Nursing Seminar, Grady Memorial Hospital, Atlanta Georgia.
24. 2012      Introduction to Neurological Emergencies, Increased Intracranial Pressure, and Neuroradiology in Adults and Children. Emergency Medicine Resident Lecture, Brown University, Providence, Rhode Island.
25. 2013      Goal Directed Therapy for Traumatic Brain Injury. Neurosurgery Resident Lecture, Brown University, Providence, Rhode Island.
26. 2013      Goal Directed Therapy and Exception from Informed Consent in the ProTECTIII Trial. Emergency Medicine Resident Lecture, Brown University, Providence, Rhode Island.
27. 2013      Neurointensive Care and Goal Directed Therapy in Traumatic Brain Injury and the ProTECTIII Clinical Trial. Neurocritical Care Nursing / Midlevel Provider lecture at Rhode Island Hospital.
28. 2013      Goal Directed Therapy in Traumatic Brain Injury, Polytrauma, and the ProTECTIII Clinical Trial. Critical Care Nursing lecture in Trauma ICU at Rhode Island Hospital.
29. 2014      Exception From Informed Consent, 21CFR50.24 - Responsible Conduct of Research Lecture, Department of Emergency Medicine, Brown University, Providence, Rhode Island.
30. 2015      Exception From Informed Consent, 21CFR50.24, and the ESETT Clinical Trial - Responsible Conduct of Research Lecture, Department of Emergency Medicine Brown University, Providence, Rhode Island.
31. 2015      Asselin N, Choi B, Pettit CC, Dannecker M, Jones MS, **Merck L**, Suner S, Williams K, Jay GD, Kobayashi L. Interim results of pre-hospital provider workload assessment during simulation testing of experimental device-assisted cardiac arrest resuscitation. Lifespan Research Celebration, Providence, Rhode Island.
32. 2016      Understanding Research Relationships. Responsible Conduct of Research Lecture, Department

of Emergency Medicine Brown University, September 2016, Providence, Rhode Island.

33. 2016 The Identification and Treatment of Increased Intracranial Pressure in Adults and Children. Educational Lecture, Department of Emergency Medicine Brown University, May 2016. Providence, Rhode Island.
34. 2017 Conducting Research. **Merck L** and Jay G. Research Education Lecture Series, Department of Emergency Medicine Brown University, Providence, Rhode Island.
35. 2017 Traumatic Brain Injury, Epidemiology and Advances in Clinical Care. Neuroscience Graduate Program in House Seminar, Brown University, Providence, Rhode Island.
36. 2018 Research in Emergency Medicine. Emergency Medicine Resident Lecture and Panel Discussion. Brown University, Providence, Rhode Island.
37. 2018 History and Ethics of Informed Consent and Exception From Informed Consent in Emergency Research, Department of Engineering. Engineering 2910G - Translational Engineering and Entrepreneurship. Brown University, Providence, Rhode Island.
38. 2018 Conducting Research. **Merck L** and Jay G. Research Curriculum Course, for graduate medical education fellow with Brown University, Department of Emergency Medicine Brown University, Providence, Rhode Island.
39. 2018 Traumatic Brain Injury: Special Considerations in Clinical Research. Resident education lecture, Department of Emergency Medicine Brown University, Providence, Rhode Island.
40. 2019 Exception from Informed Consent, Special Considerations in Emergency Research. University of Florida Institutional Review Board, Annual Retreat, Gainesville, Florida.
41. 2020 SIREN Steering Committee Annual Meeting, Electronic Data Capture Working Group Summary. Clearwater, Florida.
42. 2020 Influence of cooling duration on efficacy in cardiac arrest patients (ICECAP), Investigator Meeting. Ancillary Study Presentation: Clinical Imaging and Data Research Repository (CIDRR), Clearwater, Florida.
43. 2020 Traumatic Brain Injury: Special Considerations in Clinical Research. Resident education lecture. Department of Emergency Medicine University of Florida at Gainesville.
44. 2020 Seminar, Clinical and Translational Science Institute: Translational Science of COVID-19: Epidemiology of COVID-19 in First Responders and Frontline Providers. University of Florida, Gainesville.
45. 2021 Special Considerations in Acute Traumatic Brain Injury Research, Lisa Merck, Christopher Robinson, Carolina Maciel. The University of Florida Brain Center, Brain Building Lecture Series, University of Florida, Gainesville.
46. 2022 Research Introduction, Emergency Medicine Residency Lecture, Virginia Commonwealth University, Richmond, VA.
47. 2022 Informed Consent in Emergency Clinical Research, VCU Human Research Protection Program, Virginia Commonwealth University, Richmond, VA.

- 48. 2022 All Fellows Education Series, Speaker Panel: The Science and Art of Promotion in Academics. VCU Health Systems, Virginia Commonwealth University, Richmond, VA
- 49. 2023 Exception from Informed Consent, CFR50.24, Emergency Medicine Resident Conference, Virginia Commonwealth University, Richmond, VA
- 50. 2023 Traumatic Brain Injury, Emergency Medicine Resident Conference, Virginia Commonwealth University, Richmond, VA
- 51. 2023 The BOOST3 Clinical Trial, Surgical Trauma Attending Conference, Virginia Commonwealth University, Richmond, VA
- 52. 2023 Acute Care Clinical Trial Execution, TBI, CCTR801 Clinical Practicum Lecture, Virginia Commonwealth University, Richmond, VA
- 53. 2024 Emergency Medicine Research and CFR50.24 Exception from Informed Consent. Lecture to Pediatric Emergency Medicine Fellows, Virginia Commonwealth University, Richmond, VA
- 54. 2025 Mindfulness in Designing Clinical Trials for Populations with High Phenotypic Variability. Center for Rehabilitation Science and Engineering Research Grand Rounds, Virginia Commonwealth University, Richmond, VA
- 55. 2025 Traumatic Brain Injury, Joint Emergency Medicine / Trauma Surgery Conference, Virginia Commonwealth University, Richmond, VA
- 56. 2026 Introduction to Research, Part I, Resident / Fellow / Medical Student Conference, Emergency Medicine, Virginia Commonwealth University, Richmond, VA
- 57. 2026 Introduction to Research, Part II, Resident / Fellow / Medical Student Conference, Emergency Medicine, Virginia Commonwealth University, Richmond, VA
- 58. 2026 Randomized Clinical Trials, Population Health MED272 Population Health and Evidence - Based Medicine - M2 Fall (PHEMBM2), VCU School of Medicine, *lecture for 9/2026*

### **Seminar Director:**

- 2023 - National, Seminar Director and Faculty, NIH SIREN Research Fellow Didactic Monthly Lecture Series, "*Siren calls*"
- 2023 - 2025 Local, Emergency Medicine Resident Conference, *Research Incubator*, monthly lecture and conference series, Virginia Commonwealth University, Richmond, VA

### **FORMAL TEACHING (GRADUATE MEDICAL EDUCATION & MEDICAL SCHOOL):**

- 2025 – current Professor, with Tenure Virginia Commonwealth University (VCU), Richmond, VA  
Professor, Emergency Medicine, VCU  
Affiliate Professor, Neurosurgery, VCU

- Affiliate Professor, Physical Medicine & Rehabilitation, VCU  
Vice Chair of Research, Department of Emergency Medicine VCU SOM  
Medical Director, Clinical Trials Collaborative, VCU Health Systems
- 2022 – 2025  
Professor of Emergency Medicine VCU SOM  
Vice Chair of Research, Department of Emergency Medicine  
Medical Director, Acute Clinical Research, Virginia Commonwealth University Health Systems
- 2019 – 2022  
Associate Professor of Emergency Medicine University of Florida at Gainesville  
Affiliate Associate Professor of Neurology | Neurocritical Care  
Affiliate Associate Professor of Health Outcomes and Biomedical Informatics
- 2019 – current  
Adjunct Associate Professor of Neurosurgery, Alpert Medical School, Brown University, Providence, RI
- 2025 – current  
Co-Course Director, PHAR691  
Special Topics in Pharmacy - Independent Research, Neuroscience Critical Care  
Research Elective, VCU School of Pharmacy / VCU School of Medicine
- 2023 – current  
Lead faculty/Director: Research, Education, and Mentorship cycle (the *REM* cycle), a collaboration between trainees / principal investigators to facilitate cross-campus research and mentorship. Weekly didactic and project driven meetings are inclusive of participants from undergraduate, graduate, and medical school campuses, VCU SOM
- 2023 – current  
National Seminar Director and Faculty: SIREN Calls, a monthly didactic series for early-stage investigators, fellows, and collaborators within the U01 SIREN clinical trial network (NIH Network for Emergency Care Clinical Trials: Strategies to Innovate EmeRgENcy Care Clinical Trials Network).
- 2022 – current  
Faculty, Senior Emergency Medicine Clerkship, MEDI-42004, Emergency Medicine – AI, Department of Emergency Medicine, VCU, Richmond, VA
- 2023 – 2025  
Lecturer, *Research Incubator*. Monthly emergency medicine resident, fellow, and medical student didactic series in research education, VCU, Richmond, VA
- 2023 – 2024  
Faculty Mentor, Honors Summer Undergraduate Research Program, Wright Center for Clinical and Translational Research, VCU, Richmond, VA
- 2019 – 2021  
Adjunct Associate Professor of Emergency Medicine, Neurosurgery, and Diagnostic Imaging Alpert Medical School, Brown University, Providence, RI
- 2019 – 2022  
Faculty, Senior Emergency Medicine Clerkship MDC7710  
University of Florida College of Medicine, Gainesville, FL
- Class section: 345G  
Class section: 3472  
Class section: 347D  
Class section: 347H
- 2018 – 2019  
Associate Professor of Emergency Medicine, Neurosurgery, and Diagnostic Imaging

- Alpert Medical School, Brown University, Providence, RI
- 2017 – 2018 Assistant Professor of Emergency Medicine, Neurosurgery, and Diagnostic Imaging  
Alpert Medical School, Brown University, Providence, RI
- 2016 – 2019 Director, Translational Research in Medicine, Scholarly Concentration  
Alpert Medical School of Brown University, Providence, RI
- 2018 – 2019 Clinical Instructor, Med Ed BIOL3640 and Med Ed BIOL3650 Doctoring Course,  
Preclinical program designed to combine instruction and assessment in both clinical  
skills and professional development.  
Alpert Medical School of Brown University, Providence, RI
- 2012 – 2017 Assistant Professor of Emergency Medicine and Diagnostic Imaging  
Alpert Medical School, Brown University, Providence, RI
- 2017 Instructor, Lifespan Medical Simulation Center, Code / Cardiopulmonary Arrest  
Response Training.  
Alpert Medical School of Brown University, Providence, RI
- 2015 Instructor, Clinical Skills Doctoring Course, Clinical Skills Assessment,  
Lumbar Puncture Session.  
Alpert Medical School of Brown University, Providence, RI
- 2014 Instructor, Medical Student Suturing Laboratory.  
Alpert Medical School of Brown University, Providence, RI
- 2014 Oral Board Examiner, Resident Physician Oral Board Exams.  
Alpert Medical School of Brown University, Providence, RI
- 2013 Oral Board Examiner, Resident Physician Oral Board Exams.  
Alpert Medical School of Brown University, Providence, RI
- 2010 – 2011 Instructor, Safe a Life and Protect Your Own  
Emory University School of Medicine, Atlanta, GA
- 2009 Instructor, Resident Airway Course, Emergency Medicine Residency  
Emory University School of Medicine, Atlanta, GA
- 2009 – 2012 Instructor, Procedural Skills in Emergency Medicine  
Emory University School of Medicine, Atlanta, GA

**Academic Mentees:**

- 2025 – current Kayleigh Fischer MD Assistant Professor & Director of Research for Emergency  
Medicine; Assistant Program Director, PEM Fellowship  
Department of Emergency Medicine, Division of Pediatric Emergency Medicine  
UTHealth Houston | McGovern Medical School  
Mentoring focus: CFR 50.24 EFIC in MCCT deployment (SIREN, KESETT)

- 2025 – current Kirsty Dixon PhD, Associate Professor of Surgery, Anatomy & Neurobiology, Virginia Commonwealth University.  
Department of Surgery Mentorship Committee, Scientific Discovery in Neurological Injury; Surgical Skills Training
- 2023 – current Michael Joyce MD, Associate Professor of Emergency Medicine, Virginia Commonwealth University. SIREN Fellow, NIH Clinical Trial Execution in ICECAP, BOOST3, and DoD sponsored BioBOOST.  
2023-2024: Emergency Medicine Faculty
- Fellow, SIREN | CORE-EM Hub Alliance in the Network for Emergency Care Clinical Trials: Strategies to Innovate EmeRgENcy Care Clinical Trials Network (SIREN) NIH NHLBI NINDS U24NS100673-06 (MPIs: Merck- contact, Wright, Papa, Selker, Mosier, Jones)
- 2023 – current Megan Donahue MD MPH, Assistant Professor of Emergency Medicine, Virginia Commonwealth University. SIREN Fellow, NIH Clinical Trial Execution in ICECAP, POSTICECAP, & BOOST3.  
2023-2024: Emergency Medicine / Internal Medicine Faculty
- 2023 Fellow, SIREN | CORE-EM Hub Alliance in the Network for Emergency Care Clinical Trials: Strategies to Innovate EmeRgENcy Care Clinical Trials Network (SIREN) NIH NHLBI NINDS U24NS100673-06 (MPIs: Merck- contact, Wright, Papa, Selker, Mosier, Jones).
  - 2024 AAMC Early Career Women Faculty Leadership Development Seminar
  - 2024 Public Health Institute Fellowship with Access Bridge, Initiation of female contraception programs in the emergency department setting.
- 2022 – current Stephanie DeMasi MD, Assistant Professor of Emergency Medicine, Critical Care Fellow, Virginia Commonwealth University; NIH Clinical Trial Execution in ICECAP & BOOST3.  
2023: Emergency Medicine Faculty, Vanderbilt University
- T32 NIH NIGMS (2023): Investigation of the Ideal Neuromuscular Blocking Agent for Rapid Sequence Intubation.
  - K23HL181199-01 (2025): Intubation with Sedation Only to Prevent Hypoxemia during Emergency Tracheal Intubation of Critically Ill Adults: A Randomized Clinical Trial
- 2022 – current Radina Lilova MS3G2, VCU MD PhD Trainee, Medical Scientist Training Program, Mentorship in clinical trial design for studies of traumatic brain injury and research ethics (CFR 50.24 EFIC). Mentorship in biomarker analyses of phenotype of TBI, such as diffuse axonal injury.
- Charles C. Clayton School of Medicine Scholarship (2024)
  - David M. Frim MD PhD Center for Excellence in Academic Mentorship Scholarship for work in scientific discovery related to acute neurological injury (2024)
- 2024 – current Rachel Mueller, Research Assistant / mentee in clinical research execution across critical care and neurological emergencies. Matriculated to Virginia Commonwealth University School of Dentistry, 2024.

- 2022 – current Noah Hillerbrand MD Anesthesia Critical Care Fellow, VCU 2025  
Emergency Medicine Graduate 2025, Mentorship in clinical trial design, execution, and research ethics (CFR 50.24 EFIC).
- 2022 – 2024 Naomi Carter MS3G1, VCU MD PhD Trainee, Medical Scientist Training Program,  
Mentorship in clinical trial design, execution, and research ethics (CFR 50.24 EFIC).
- 2018 – 2021 Fiona Chen MD Medical School: Brown University, Providence, RI MD ‘21  
Translational Research in Clinical Medicine Scholarly Concentration, Mentee 2018-2021  
Emergency Medicine Residency: Emergency Medicine, UCSF
- 2018 T35 HL094308 NIH National Heart, Lung, Blood Institute.  
Project: Identifying Radiographic Biomarkers for the Prognostication of Traumatic Brain Injury.
  - 2019 1st place: Brown Emergency Medicine Research Symposium. The Relationship Between Magnitude of International Normalized Ratio and Outcome after Traumatic Brain Injury.
  - 2021 Dr Alexander Greene Medical Student of the Year Award: Emergency Medicine Resident Association, SAEM.
- 2018 – current Tyler Harder MS; MD, Harvard Affiliated Emergency Medicine Residency at Beth Israel Deaconess Medical Center, Boston, MA (*current*).  
Clinical Research Mentee, 2018-current  
Research Assistant, 2018 - 2019  
Medical School: Alpert Medical School of Brown University, Providence, RI ‘23  
Translational Research in Clinical Medicine Scholarly Concentration:
- 2020 Research Award: Critical Care Congress, Society of Critical Care Medicine, Orlando, FL 2/2020: Patient-Specific Prognostication After TBI Is Related to Bleed Phenotype and Anatomic Location.
- 2015 – current Owen Leary BS; MD PhD candidate ‘28  
Program for Liberal Medical Education, Brown University, Providence, RI  
Medical School: Warren Alpert Medical School of Brown University, Providence, RI  
Translational Research in Clinical Medicine Scholarly Concentration:
- 2020 Research Award: Critical Care Congress, Society of Critical Care Medicine, Orlando, FL 2/2020: Outcome Prediction with Computer-Assisted Volumetry and ABC/2 in Traumatic Intra-Axial Hemorrhage.
  - 2019 First Place, Trainee Competition Winner Best Poster on Cranial Trauma  
AANS/CNS Joint Section on Trauma and Critical Care: Volume of SDH & EDH Measured by Computer-Assisted Estimation Is More Predictive of Mortality and Functional Disability than ABC/2, National Neurotrauma Society, Pittsburgh, PA.
- 2020 – 2022 Carolina B. Maciel MD MSCR, Assistant Professor of Neurology and Neurosurgery, University of Florida at Gainesville.
- American Heart Association Innovative Project Award, 11/2020, VIGAB STAT Feasibility of delivering vigabatrin (VGB) within 48 hours of onset of post-anoxic status epilepticus due to cardiac arrest.
  - NINDS R25, Clinical Trials Methodology Course Cohort, University of Michigan, 2021. VIGAB STAT Phase IIb planning

- 2021– 2022 Torben Becker MD PhD, Assistant Professor of Emergency Medicine and Critical Care Medicine, University of Florida at Gainesville.
- SAEM Foundation/Global EM Academy Research Pilot Grant Award, Increasing Access to Pre-Emergency Care and Treatment in Ghana.
- 2018 – 2019 Ian Pan, MD
- Medical School: Alpert Medical School of Brown University, Providence, RI '20  
Residency: Diagnostic Imaging Brigham and Women's Hospital, Boston, MA  
Translational Research in Clinical Medicine Scholarly Concentration Mentee: Advanced Image Analysis in Traumatic Brain Injury and Stroke. Artificial Intelligence in Medicine.
- 2018 RSNA Trainee Research Prize: Radiologic Society of North America for abstract, Predicting Thyroid Nodule Malignancy with Efficient Convolutional Neural Networks.
  - 2018 1st Place, RSNA Pneumonia Detection Challenge: Drs Ian Pan and Cadrin-Chenevert placed #1 (out of 1,400 submissions from 85 countries).
- 2019 – 2021 Robert Cueto, MD candidate '25  
Research Assistant Mentee 2019 - 2021  
Medical school matriculation, 2021, University of Florida, Gainesville, FL
- 2020 – 2021 Miranda Solly MD  
Medical School: University of Florida at Gainesville.  
 Research in: COVID 19 Epidemiology in First Responders and Front-Line Providers.
- 2013 – 2018 Jena Lerch BSN, PhD  
Research Assistant Mentee, Brown University (2013 – 2018)  
BSN, Rhode Island College, 2018  
Doctor of Nursing Practice, Florida International University, 2022
- 2015 – 2016 Erin O'Donnell PA  
Research Assistant Mentee, Brown University (2015-2016).  
Physician's Assistant, University of Saint Joseph, West Hartford, CT (2019).  
Hasbro Pediatric Emergency Medicine PA Program, Providence, RI
- 2014 – 2019 Madeline Cosgriff  
Research Intern, Assistant, & Mentee, Brown University, Providence, RI  
Project: AI in Pediatric Hydrocephalus. Alpert Medical School of Brown University, Providence, RI
- 2014 – 2015 Michael Lunney MPH  
Graduate Student, Georgia State University, Athens, GA  
Project: Master of Public Health, Concentration in Health Management and Policy.  
Thesis: Effect of progesterone administration in traumatic subarachnoid hemorrhage. Atlanta, GA
- 2013 – 2015 My (Virginia) Tran MD  
Research Assistant Mentee, Brown University

Medical School, Harvard Medical School, Boston, MA.  
Residency Match: Emergency Medicine Highland Hospital, CA

- 2011 – 2012 Michael Holdsworth MD  
Medical Student mentee, Emory University  
Project: Use of Informed Consent for Computerized Tomography, Emory University School of Medicine, Atlanta, Georgia.  
Residency Match: Emergency Medicine/Pediatric Emergency Medicine – University of Maryland Medical Center, Baltimore, MD
- 2011 – 2012 Jordan Kaylor MD  
Medical Student mentee, Emory University  
Project: The Effect of Electronic Charting and Physiologic Monitoring on Treatment of Traumatic Brain Injury in an Urban Emergency Department, Emory University School of Medicine, Atlanta, Georgia.  
Residency Match: Emergency Medicine – Northwestern Memorial Hospital, Chicago, Illinois
- 2011 – 2012 Joshua Keithley MD  
Medical Student mentee, Emory University  
Project: Use of a Video Educational Module as an Adjunct to Written Informed Consent for Computerized Tomography, Emory University School of Medicine, Atlanta, Georgia.  
Residency Match: Emergency Medicine – John Peter Smith Hospital, Fort Worth, TX
- 2010 – 2011 Margaret Gipson MD  
Medical Student mentee, Emory University  
Project: Informed Consent for Computerized Tomography, Emory University School of Medicine, Atlanta, Georgia.  
Residency Match: Emergency Medicine – Carolinas Medical Center, Charlotte, NC
- 2010 – 2011 Samuel Chang MD  
Medical Student mentee, Emory University  
Project: Goal Directed Therapy for Traumatic Brain Injury, Emory University School of Medicine, Atlanta, Georgia.  
Residency Match: Emergency Medicine – Carolinas Medical Center, Charlotte, NC
- 2009 – 2012 Heather Gunn MD  
Emergency Medicine Resident, Emory University School of Medicine, Atlanta, Georgia

**Research Education & Mentorship (REM) Cycle Student Mentees:**

- 2023 – current Michael Keller (VCU SOM Class of 2027)  
Dylan Kelley (MD PhD candidate)  
Nikhil Chandravel (VCU SOM Class of 2027)  
Joanna Le Gallouder (VCU SOM Class of 2027)  
Sebastian Gutierrez (VCU SOM Class of 2027)  
Nancy Beinlich (VCU SOM Class of 2027)  
Radina Lilova (VCU SOM MD/PhD Candidate)

Naomi Carter (VCU SOM MD/PhD Candidate)  
Sreedhatri Kandlakunta (VCU 2023; matriculated to  
Drexel Univ SOM '25)

### **Certification:**

2010 -	Active Board Certification	American Board of Emergency Medicine
2022 -	Active License	Virginia Board of Medicine
2019 -	Active License	Florida Medical Board
2007 -	Active License	North Carolina Medical Board
2008 -	Active License	Georgia Medical Board
2012 - 2020	License	Rhode Island Medical Board
2002	USMLE Step II	Passed
2000	USMLE Step I	Passed
NIH Stroke Scale (NIHSS)		Certification
ABCD2 Training		Certification
Modified Rankin Scale (mRS)		Certification
BLS/ACLS/ATLS/PALS/NALS		Certification

### **Community Work and Public Service Education:**

2026 –	Making Headway, Brain Injury Association of Virginia, Community Consultation event for KESETT clinical trial
2024 –	Brain Injury Association of Virginia, Community Consultation: Traumatic Brain Injury research and classification updates, Richmond, VA
2023 –	Volunteer, Habitat for Humanity, Richmond, VA
2023	Panelist - Ethics. The Maggie L. Walker Governor's School for Government and International Studies, Honor Council - Richmond, VA
2023	WBTK, Spanish Radio interview Richmond, VA, Mount Rich Media, LLC; Traumatic Brain Injury research in Virginia, The BOOST3 clinical trial at VCU Health System.
2020 – 2022	Elected to serve on the School Advisory Council, Alachua County School District, FL
4/2020	Channel NBC Television Interview COVID-19 Testing initiative for first responders and emergency department employees in North Central Florida
4/2020	Channel ABC Television Interview COVID-19 Testing initiative for first responders and emergency department employees in North Central Florida
4/2020	NPR Radio interview Emergency Medicine COVID Response, and importance of personal protective equipment

- 12/20/19 NewsRadio WIOD - Radio interview Miami's News, Traffic, and Weather Station  
Traumatic Brain Injury research in Florida, The BOOST3 clinical trial at Shands Hospital.
- 2012 – 2015 Town Council: Environmental Conservation Commission, Barrington, RI
- 12/2015 Providence en Espanol News Article: Exception from Informed Consent and ESETT  
Rhode Island Hospital y Hasbro Children's Hospital participarán en un ensayo  
investigativo sobre medicinas anticonvulsivas administradas en salas de emergencia
- 11/2015 Newport Daily News  
Clinical Trial Public Service Announcement Exception from Informed Consent and  
the ESETT clinical trial
- 11/2015 Rhode Island Medical Journal, Public Service Announcement  
Exception from Informed Consent and the ESETT Clinical Trial
- 11/2015 The Independent, Public Service Announcement  
Exception from Informed Consent and the ESETT Clinical Trial
- 7/2013 Latino Public Radio, Interview  
Traumatic Brain Injury and Exception from Informed Consent  
[http://www.lprri.org/inicio/index.php?categoryid=65&p2\\_articleid=23534](http://www.lprri.org/inicio/index.php?categoryid=65&p2_articleid=23534)
- 8/2013 Exception from Informed Consent and Research in Traumatic Brain Injury. Conference  
with Brain Trauma Survivors, Neurorestorative Care, Charlestown, RI
- 8/2013 Providence Journal Newspaper Interview  
Traumatic Brain Injury and Exception from Informed Consent Research
- 8/2013 Channel 10 News, Interview  
Traumatic Brain Injury and Exception from Informed Consent Research
- 7/2013 Rhode Island Medical Journal  
The ProTECTIII Clinical Trial  
<https://www.rimed.org/rimedicaljournal/2013-07/2013-07-55- news-briefs.pdf>

**INDUSTRY CONSULTANT:**

- 2018 – 2019 Shire Development LLC, EFIC design of clinical trials  
2021 – 2023 Novartis, TBI Expert Panel  
2021 – Gryphon Bio Inc, Medical Consultant, Clinical Trial Design; Clinical PI

**MEMBERSHIP IN SOCIETIES:**

- 2021 – Society for Clinical Trials  
2020 – Society for Critical Care Medicine  
2013 – Neurocritical Care Society  
2013 – National Neurotrauma Society

- 2013 – Society for Neurotrauma, Women in Neurotrauma Research
- 2012 – Academy of Women in Academic Emergency Medicine
- 2011 – Image Gently, The Alliance for Radiation Safety in Pediatric Imaging
- 2008 – American College of Emergency Physicians
- 2008 – Society for Academic Emergency Medicine