#### **CURRICULUM VITAE**

# William D. Binder, MD MA FACEP

Brown University Department
of Emergency Medicine
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### **EDUCATION**

University of Pennsylvania, 1981, B.A.

Honors European History

Graduate School Harvard University, 1984, M.A.

History of Science

Medical School George Washington University, 1990, MD

Medicine

### **POSTGRADUATE TRAINING**

6/90 – 7/91	Intern	Internal Medicine	University Hospital University of Maryland Baltimore, MD
7/92 -7/94	Resident	Internal Medicine	Rhode Island Hospital Brown University Providence, RI
1/95 – 7/98	Resident	Emergency Medicine	Rhode Island Hospital Brown University Providence, RI

2/2019 – 6/2019 Brown Physicians Brown University/Bryant

Leadership Training University

Brown Physicians Incorporated Leadership Academy is a five-month, graduate-level, executive leadership program designed specifically for up-and-coming healthcare providers and healthcare administrators with an emphasis on strategic leadership, financial literacy and root cause problem-solving. Developed in conjunction with Bryant University, the program teaches participants systems analysis, process improvement, emotional intelligence and change management techniques through hands-on team project assignments related to real-world challenges within their healthcare areas. Participants must design implementable solutions then "sell" their ideas to their organization's senior leadership team to gain buy-in and executive sponsorship.

### **HONORS AND AWARDS**

1981	Lynn Case Award, European History , University of Pennsylvania
1998	Wilderness Medical Society Research Award
2004	Fellow of the American College of Emergency Physicians
2009	Partners in Excellence Award
2010	Partners in Excellence Award
2011	SAEM CPC Discussant
2014	Nominee: HAEMR faculty attending of the year
2018	CARE Award, Miriam Hospital
2019	CARE Award, Miriam Hospital

#### PROFESSIONAL LICENSES AND BOARD CERTIFICATION

American Board of Internal Medicine 1994 (recertified 12/09)

American Board of Emergency Medicine 1999 (recert 12/08, 12/18)

National Board of Medical Examiners 1991

ACLS Instructor 1998 – 2015

RI Medical License 1994 (Expires 6/22)

MA Medical License 1998 (Expires 10/22)

### **ACADEMIC APPOINTMENTS**

1998 – 2009	Assistant in Medicine	Harvard Medical School Boston, MA
2009 - 2014	Assistant Professor of Surgery	Harvard Medical School Boston, MA
1998 – 2014	Clinical Instructor of Emergency Medicine	Brown University Providence, RI
2014 – 2015	Assistant Professor of Emergency Medicine	Brown University Providence, RI
2015 -	Associate Professor of Emergency Medicine	Brown University Providence, RI

# **NON-ACADEMIC APPOINTMENTS**

2014 - 2021 Advanced Practice Strategies/ Boston, MA/Cary, NC

Relias Learning

**Director of Emergency Medicine** 

Responsible for content development, product management and marketing strategy for on line learning company

CME/CNE Courses written include:

Acute Respiratory Failure for Nurses 2021 (1 hour CE)

Clostridioides difficile 2021 (1 hour CE)

Nursing onboarding suite 2020: ICU, Med/Surg, Emergency: (17.5

hours CE for each field of study)

Hospital Readmissions 2020 (3.75 hours CME)

High Risk Chest Pain in the Emergency Department: 2019 (7.25 Hours

CME)

High Risk Abdominal Pain in the Emergency Department: 2019 (6.5

Hours CME)

Communication in the Emergency Department 2019(2.5 Hours CME) Triage in the Emergency Department: 2019 (2.5 hours CME/CNE)

Changing Patient Status in Med/Surg Nursing (2.5 hours CNE)

Chain of Command (1 hour CNE)

Pediatric Fever without a Source: Serious Bacterial Infection in

Neonates, Infants and Toddlers (2.75 hours CME)

Nurse On-Boarding in the Emergency Department (2017) (11.5 hours

CNE):

Core Skills

Clinical Knowledge Special Populations

Changing Patient Status: Critical Thinking

Precepting

Sepsis in the ED (2017) (3 hours CNE)

# **HOSPITAL APPOINTMENTS**

# PAST:

1991	General Medical Officer	United States Public Health Service, HIS Ft. Yates Hospital, Ft. Yates, ND
1992	Clinic Physician	Himalayan Rescue Association Pheriche, Nepal
1994 - 1995	Attending Physician Internal Medicine	Rhode Island Hospital Brown University Providence, RI
1998 - 2014	Attending Physician Emergency Services	Massachusetts General Hospital Harvard University Boston, MA
2014 - 2018	Attending Physician, Emergency Medicine	South County Hospital S. Kingstown, RI
<b>CURRENT:</b>		
1998 - present	Attending Physician Emergency Medicine	Miriam Hospital Rhode Island Hospital Brown University Providence, RI
2011 - present	Faculty	Section of Wilderness Medicine Department of Emergency Medicine

# **HOSPITAL and DEPARTMENTAL COMMITTEES**

1999 – 2008	Harvard Affiliated Emergency Medicine Residency Admissions	Massachusetts General Hospital Harvard University
1999 – 2005	Physicians Organization Advisory Committee—Emergency Services	Massachusetts General Hospital
2005 – 2009	Biothreats Advisory Committee	Massachusetts General Hospital
2002 - 2014 2003 - 2014	Infection Control Committee Director, Radiology-EM Clinical Practice Management	Massachusetts General Hospital Massachusetts General Hospital
2005 - 2014	Liaison, NHQI/Pneumonia Committee	Massachusetts General Hospital
2006 - 2014	Quality and Safety Committee	Massachusetts General Hospital
2014 - present	CME Committee	Rhode Island Hospital
2015	Op Ex Committee	Rhode Island Hospital
2015-2016	Chair: 5S Committee	Rhode Island Hospital
2018 - 2020	Staffing Optimization Committee	Brown Emergency Medicine
2019- present	Information Systems Committee (Help Juice)	Brown Emergency Medicine
2020-present	Disaster Response Team	Brown Emergency Medicine
2020-present	Investment Committee	Brown Emergency Medicine
2022-present	Board of Directors	Brown Emergency Medicine
2022-present	Chair: Benefits Committee	Brown Emergency Medicine

# **MEMBERSHIP IN SOCIETIES**

1998 – Present Society of Academic Emergency Medicine

Member: Section on Wilderness Medicine

1998 – Present American College of Emergency Medicine

### **PUBLICATIONS**

### **Original Publications in Peer Reviewed Journals**

**Binder W**, Mermel L. Leptospirosis in an Urban Setting: Case Report and Review of an Emerging Infectious Disease. Journal of Emergency Medicine. 1998; 16: 851 – 856.

Reisner, AT, **Binder WD**, Nadel ES, Brown DFM. Complicated Acute Myocardial Infarction. Journal of Emergency Medicine, 2001; 20: 73 – 79.

**Binder W**, Nadel ES, Brown DFM. Blurred vision, epistaxis and fever in a young man. Journal of Emergency Medicine. 2002: 23(2): 275-278.

**Binder W**, Kabrhel C. Clinical Pearls: A 37 year old man with a rash. Academic Emergency Medicine. 2003; 10(7): 776 – 779.

Gordon JA, Tancredi D, **Binder W**, Wilkerson W, Shaffer DW, Cooper J. Assessing Global Performance in Emergency Medicine Using a High-Fidelity Patient Simulator: A Pilot Study. Academic Medicine. 2003; 78:

Nagurney JT, Gatha N, Resnick J, Borczuk P, Filbin M, **Binder W**, Brown DF, Chang Y, Swap CJ, Lev M, Singhal AB, Furie KL, Koroshetz WJ. Does CT Imaging of the Head Change Projected Disposition of Emergency Department Patients? Academic Emergency Medicine. 2005; 12(Suppl 1):27.

Nagurney JT, Resnick JB, Gatha N, **Binder W**, Filbin M, Borczuk P, Brown DF, Swap C, Parry B, Chang Y. Emergency Physicians and the Neurologic Examination. Annals of Emergency Medicine. 2005; 46(3):S88.

Swap C, Brown D, Borczuk P, **Binder W**, Filbin M, Gatha N, Resnick J, Chang Y, Nagurney JT. Physician Prediction of Emergency Department Head CT Scan Results. Academic Emergency Medicine. 2005; 12(Suppl 1):170.

**Binder WD**, Fifer MA, King ME, Stone JR. A 45 year old Runner with Sudden Loss of Consciousness While Jogging. NEJM. 2005; 353:

Lange BB, Penkar P, **Binder WD**, Novelline RA. Are cervical spine radiograph examinations useful in patients with low clinical suspicion of cervical spine fractures? An experience with 254 cases. Emergency Radiology. 2010; 17: 191- 193.

**Binder WD**, Traum AZ, Makar RS, Colvin RB. Case 37-2010- A 16 year old girl Confusion, Anemia, and Thrombocytopenia. NEJM. 2010; 363: 2352-2361.

Thomas LE, **Binder WD**, Brown DF, Nadel ES. Fever and Rash in a Young Man. Journal of Emergency Medicine. 2011; 40: 58 -61.

Abujudeh HH, Kaewla R, McMahon PM, **Binder W**, Novelline RA, Gazelle GS, Thrall JH. Abdominopelvic CT increases Diagnostic Certainty and Guides Management Decisions: A Prospective Investigation of 584 Patients in a Large Academic Medical Center. American Journal of Roentgenology 2011; 196: 238 – 243.

Jost S, Quillay H, Reardon J, Peterson E, Simmons RP, Parry BA, Bryant NNP, **Binder WD**, Altfield M. Changes in Cytokine Levels and NK Cell Activation associated with Influenza. PLoS ONE 6(9): e25060. September 23, 2011.

Vadalva H, Chan A, **Binder W**, Chatterjee N, Francis S, Ghoshharjra B. Low Radiation Coronary CT Angiography without Beta-Blockers in an Emergency Department Patient with Reactive Airway Disease. Cardiovascular Images. December 2013 (57).

Gonen L, **Binder W**, Brown DFM, Nadel ES. Eosinophilia and Rash. Journal of Emergency Medicine. 2013 February; 44(2): 469 – 471.

Pallin DJ, **Binder WD**, Allen MB, Lederman M, Parmar S, Filbin MR, Hooper DC, Camargo CA. Clinical trial: Comparative effectiveness of cephalexin plus trimethoprim-sulfamethoxaxole vs. cephalexin alone for the treatment of uncomplicated cellulitis: a randomized controlled trial. Clinical Infectious Diseases 2013. 56(12): 1754 – 1762.

Gunn AJ, Mangano MD, Bugmire BS, Sahani DV, **Binder WD**, et al. Toward Improved Radiology Reporting Practices in the Emergency Department: A Survey of Emergency Department Physicians. J Radiol Radiat Ther. 2013; 1: 1013.

MacKuen C, **Binder W**. A Broken Heart: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015;98(1): 54 – 56.

Kazakin A, **Binder W**. Abdominal Pain and Elevated Lipids: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98(3): 36 - 38.

**Binder WD**, Gupta R. African Tick-Bite Fever in a Returning Traveler. Journal of Emergency Medicine 2015; 48: 562 – 565.

Wong WH, Hudepohl N, Becker B, **Binder W**. Too Weak to Move: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98(4):42-45.

Kinnaman KA, **Binder WD**, Nadel ES, Brown DFM. Petecchiae, Anemia, and Thrombocytopenia. Journal of Emergency Medicine. 2015; 48: 461 – 465.

Rybasek-Smith H, Porter P, **Binder W**. Chest Pain in a Man at Rest: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98 (5):

**Binder W**, Greve M. Twist and Turn: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98 (6)

**Binder W,** Maldonado N, Brown DFM, Miller E. A Gardener with a Fever for 2 weeks. Journal of Emergency Medicine. 2015; 48: 720 – 723.

Gemme S, Jay G, **Binder W**. An Electrical Burn: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98(7)

Ameli J, **Binder W**. A Woman with Shortness of Breath: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98 (8)

MacKuen C, Feden J, Marr B, **Binder W**. Chest Pain and a Sore Throat: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98(11): 42- 44.

Ye T, Spitalnic S, **Binder W**. Pott's Puffy Tumor in a 12 year old boy. Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2015; 98 (12): 50 - 52.

Pandharipande PV, Reisner AT, **Binder WD**, Zheer A, Gunn ML, Linnau KF, Miller CM, Avery LL, Herring MS, Tramontano AC, Dowling EC, Abujudeh HH, Eisenberg JD, Halpern EF, Donelan K, Gazelle GS. Computed Tomography (CT) in the Emergency Department: A Real Time Study of Changes in Physician Decision Making. Radiology. 2016; 278: 812 – 821.

Ruhland L, Ameli J, **Binder W.** A Case of Hypothermia: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2016; 99 (4): 34 – 36.

Welsh L, **Binder WD**, Miller E. Unsteady Gait and Dizziness. Journal of Emergency Medicine. 2016; 50: 887 – 890.

Zhang XC, Siket M, **Binder W**. The Pharma-fever that almost got away: Serotonin Syndrome. Rhode Island Medical Journal. 2016; 99(6): 29 - 31

Lloyd M, Zhang XC, Joseph S, Siket M, Baruch J, **Binder W**. Peeping Painless Proptosis: Potts Puffy Tumor. Rhode Island Medical Journal. 2016; 99(7)

McCluskey SM, Schuetz P, Abers MS, Bearnot B, Morales M, Hoffman D, Patel S, Rosario L, Chiappa V, Parry B, Callahan RT, Bond S, Lewandrowski K, **Binder W**, Filbin M, Vyas JM, Mansour MK. Serial Procalcitonin as a Predictor of Bacteremia and Need for Intensive Care Unit Care in Adults with Pneumonia, Including Those with Highest Severity: A Prospective Cohort Study. Open Forum Infectious Diseases. 4(1):ofw238, 2017.

Eisenberg JD, Reisner AT, **Binder WD**, Zaheer A, Gunn ML, Linnau KF, Miller CM, Tramontano AC, Herring MS, Dowling EC, Halpern EF, Donelan K, Gazelle GS, Pandharipande PV. Role of Computed Tomography (CT) in the Diagnosis of Non-Specific Abdominal Pain: A Multicenter Analysis. American Journal of Roentgenology. 2017; 208: 570 – 576.

**Binder W**, Dessie A. Spontaneous Rupture of the Spleen due to Infectious Mononucleosis: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2017; 100 (7).

**Binder W**, Thorsen J, Borczuk P. Respiratory Syncytial Virus (RSV) in Adult Emergency Department Patients: Do Emergency Providers Consider RSV as an Admission Diagnosis. American Journal of Emergency Medicine. 2017; 35: 1162 – 1165.

**Binder W**, Blackwood B, Lee S, Liebmann O. A Soccer Mom with Chest Pain: Spontaneous Coronary Artery Dissection in a Young Woman. Rhode Island Medical Journal. 2017; 100 (8)

**Binder W,** Cohen P, Musisca N, Sullivan F. A Woman with a Necrotizing Soft Tissue Infection: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2017: 100; 12.

Wang LT, Cleveland R, **Binder W**, Zwerdling R, Stamoulis C, et al. Similarity of Chest X-Ray and Thermal Imaging of Focal Pneumonia: A Randomized Proof of Concept Study at a Large Urban Teaching Hospital. BMJ open. 2018 Jan 5; 8:e017964. Doi: 10.1136/bmjopen-2017-017964.

Cohen P, Musisca N, **Binder W**. A 57 year old Man with a Spontaneous Carotid Artery Dissection: Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2018: 101: 45-47.

Gao GT, **Binder W**. Embolization of a Contraceptive Implant into the Pulmonary Vasculature in an Adolescent Female. American Journal of Emergency Medicine. 2018 Mar 3. pii: S0735-6757(18)30181-5. doi: 10.1016/j.ajem.2018.03.004.

Musisca N, VanDusen H, Mierjeski A, **Binder W**. Babesiosis and Lyme Disease in a 68 year old Man. Case Records of the Brown University Emergency Medicine Residency. Rhode Island Medical Journal. 2018: 101(6): 31-33

Blackwood B, **Binder W.** Unusual Complications from Babesia Infection: Splenic Infarction and Splenic Rupture in Two Separate Patients. Journal of Emergency Medicine. 2018 Sep 22. Pii: S0736-4679 (18)30831-X. doi:10.106/j.jemermed.2018.08.004

Lee, LK, Reisner AT, **Binder WD**, Zaheer A, Gunn ML, Linnau KF, Miller CM, Herring MS, Tramontano AC, Kambadakone A, Catalano OA, Harisinghani M, Halpern EF, Donelan K, Gazelle GS, Pandharipande PV. Repeat CT within One Month of CT in the Emergency Department for Abdominal Pain: A Secondary Analysis of Data from a Prospective, Multicenter Study. American Journal of Radiology. 2019; 212: 1-4.

Hughes MC, Roedocker A, Ehli J, Walz D, Froehlich K, White L, **Binder W**. A Quality Improvement Project to Improve Sepsis-related Outcomes at an Integrated healthcare System. Journal of Healthcare Quality. 2019 Mar 14. doi: 10. 1097/JHQ.0000000000193. PMID: 30993462

Rich C, McAteer K, Leytin V, **Binder W**. A Free Diver with Hemoptysis and Chest Pain. RIMJ. 2019; 102(2): 33-36.

**Binder W**, Boardman TJ. Thrombotic Microangiopathy in a 59-year-old Woman. RIMJ. 2019; 102(6): 23 – 26.

**Binder W**. Better to Be Lucky Than Good? Errors in Medicine. Rhode Island Medical Journal. 2019; 102(6): 7 – 9.

Lueckel SN, Stephen AH, Monaghan SF, **Binder W**, Adams CA. Predicting Outcomes in Acute Traumatic Brain Injury (TBI). Rhode Island Medical Journal. 2019; 102(8): 34 – 36.

Naganathan S, Meehan-Coussee K, Pasichow S, Rybasack-Smith H, **Binder W**, Beaudoin F, et al. From Concerts to COVID: Transforming the RI Convention Center into an Alternate Hospital Site in Under a Month. Rhode Island Medical Journal. 2020; 103(6): 8-13.

**Binder W**, Tabaddor R, Feden J. Images in Medicine: Athletic Pubalgia. Rhode Island Medical Journal. 2020; 103(7)

Petrone G, Brown L, **Binder W**, Naganathan S, Pasichow S, Rybasack-Smith H, Duquette CE, Palka DR, Musits AN. The Calm Before the Storm: Utilizing In Situ Simulation to Evaluate for Preparedness of an Alternative Care Hospital During COVID-19 Pandemic. Disaster Med Public Health Prep. 2021 Mar 25:1-17. doi: 10.1017/dmp.2021.80. Epub ahead of print. PMID: 33762048.

Vecchio M, **Binder W**. Pneumomediastinum in a patient with cannabinoid hyperemesis syndrome. Rhode Island Medical Journal. 2021; 104(3): 49-50.

Miller L, **Binder W.** A 38 Year Old Woman with Cerebral Venous Sinus Thrombosis. Rhode Island Medical Journal. 2021; 104(5): 34-37.

**Binder W**, Abrahams CO, Fox JM, Nestor E, Baird J. The Age-Old Question: Thematic Analysis of Focus Groups on Physician Experiences of Aging in Emergency Medicine. JACEP Open. 2021; Jul 5; 2(4):312499. doi: 10.1002/emp2.12499

Varone F, **Binder W.** A Case of Heat Stroke in the Era of Climate Change. Rhode Island Medical Journal. 2021; 104(9): 63-66.

#### Other Peer-Reviewed Publications

**Binder W**. The Emergency Department in Health Care Delivery: From Gatekeeper to Gateway. Biomedicina. 2001; 4(5); 189 -191.

**Binder WD**, Sciammella J. Scabies. E-Medicine for Web MD, 2006.

**Binder W.** Commentary: A View from the Front. Rhode Island Medical Journal. 2020; 103(3): 8.

**Binder W**. Commentary: Stepping up to the Plate in the Throes of a Pandemic. Rhode Island Medical Journal. 2020; 103(4): 8-9.

**Binder W**, Feller E, Korr K, Korr M, Friedman J. Commentary: Reflections on 2020, the Year of Covid. Rhode Island Medical Journal. 2020; 103(10): 7-11.

Binder W. Climate Change and Health: Examining the impacts of climate change on health, health care institutions, and mitigation strategies. Rhode Island Medical Journal. 2021; 104(9): 9-10.

**Binder W**. Rhode Island Healthcare: Is There Light at the End of the Tunnel? Rhode Island Medical Journal. 2022; 105(1): 48 - 49.

#### **Book Chapters**

**Binder W**, Lewander W. "Digoxin Toxicity" in Emergency Toxicology. Vicello P, ed. Little-Brown, 1998.

**Binder W**, Jagminis L. "Myocarditis," in The 5 Minute Emergency Medicine Consult. Ed. Rosen P, Barkin RM, Hayden SR, Schaider J, Wolfe R. Lippincott, Williams and Wilkins, 1999.

**Binder W.** Hypertrophic Cardiomyopathy in Essential Emergency Imaging, ed. Lewiss RE, Saul T, Shah KH. Philadelphia: Lippincott, Williams, and Wilkins, 2012

Schimmel J, **Binder WD**. "Male Genitourinary Infections" in Chin RL, Frazee BW, Zlatan C (eds). Emergency Management of Infectious Diseases. 2<sup>nd</sup> ed. Cambridge University Press, 2018.

**Binder WD.** "Civil Unrest and Rioting," in Ciottone's Disaster Medicine, 3<sup>rd</sup> edition. Submitted.

### Non-Peer Reviewed Publications

Tancredi D, **Binder W**. Correspondence regarding Dexamethasone in Adults with Bacterial Meningitis. New England Journal of Medicine. 2003; 348: 955.

#### **ABSTRACTS/POSTERS**

Stearns D, Binder W, Thomas S. An Emergency Medicine Elective Course Offered to Preclinical Medical Students Is an Effective Adjunct Teaching Method Improving Competence in the Ability to Understand and Integrate Basic Science into the Practice of Clinical Medicine,. Abstract accepted to SAEM for 5/2004 national meeting.

Nagurney JT, Swap C, Filbin M, Binder W, Borczuk P, Brown DFM, Chang, Gatha N, Resnick J. Emergency Physicians and the Neurologic Examination. Presented at ACEP 2005.

Swap C, Brown DFM, Borczuk P, Binder W, Filbin M, Gatha N, Resnick J, Chang Y, Nagurney JT. Physician Prediction of Emergency Department Cranial CT Scan Results. SAEM 2005

Nagurney JT, Gatha N, Borczuk P, Filbin M, Binder W, Brown DFM, Chang Y, Lev M, Singhal A, Furie K, Korshatz W. Does CT imaging of the Head Change Projected Disposition of ED Patients? SAEM 2005.

Choy G, McMahon P, Binder W, Novelline R, Gazelle S, Abujudeh H. The Contributions of Abdominal Computed Tomography in the Emergency Room to Diagnostic Confidence and Patient Management Decisions. American Society of Emergency Radiology Meeting, 2007.

Borczuk P, Binder W, Parry B, Lane D, Zolnick E. Antibiotic Selection in Soft Tissue Infections Caused by CA-MRSA, SAEM 2008.

Swap C, Gatha N, Brown DFM, Borczuk P, Binder W, Filbin M, Chiang Y, Parry B, Singhal A, Nagurney J. Evaluation of Acute Cerebral Ischemia in the Emergency Department: Does Magnetic Resonance Imaging Change Disposition. New England Regional Society for Academic Emergency Medicine, SAEM. 2008.

Lange BB, Penkar P, Binder W, Novelline RA. Are cervical spine plain films useful in patients with low clinical suspicion of cervical spine fracture?—Experience with 254 cases. American Society of Emergency Radiology, 2008.

Breen A, Binder W, Macias-Konstantopoulos. Violence Intervention in the Emergency Department: The Massachusetts General Hospital Experience. American Public Health Association 2012 annual meeting October 2012

Gunn AJ, Binder WD, Choy G, Mangano M, Pugmire B. Interpretation of Radiologic Examination by Emergency Physicians: Does Confidence in Interpretative Ability Change Patient Management. American Society of Emergency Radiology October 2013. Abstract 135.

Binder W, Borczuk P, Thorsen J. RSV infection in adults: Forgotten by ED Providers? SAEM May 2015.

Binder W, Thorsen J, Borczuk P. RSV in adults: A retrospective review of incidence and infection in adults. SAEM New England Regional Meeting. February 2015.

Suzanne McCluskey, MD¹; Michael Abers, MD¹; Benjamin Bearnot, MD¹; Debora Hoffman, MPH²; Maria Morales, BS²; Shreya Patel, MD¹; Lauren Rosario, BA³; Victor Chiappa, MD¹; Philipp Schuetz, MD, MPH⁴; Blair Parry, CCRC, BA²; Ryan Callahan, BS²; Kent Lewandrowski, MD⁵: William Binder, MD²; Michael Filbin, MD²; Jatin Vyas, MD, PhD¹,³; Michael Mansour, MD, PhD.¹ Serial procalcitonin measurements for improved prognostic assessment of patients admitted with pneumonia. Infectious Disease Society of America meeting, October 2015.

Pandharipande PV, Reisner AT, Binder WD, Zheer A, Gunn ML, Linnau KF, Miller CM, Avery LL, Herring MS, Tramontano AC, Dowling EC, Abujudeh HH, Eisenberg JD, Halpern EF, Donelan K, Gazelle GS. Computed Tomography (CT) in the Emergency Department: A Real Time Study of Changes in Physician Decision Making. Radiology Society of North America, December 2015.

Cleveland RH, Wang LT, Binder WD, Hibbard P. Thermal Imaging as a Diagnostic Tool for Bacterial Pneumonia. Radiology Society of North America, December 2016.

Hughes MC, Roedocker A, Ehli J, Walz D, Froehlich K, White L, Binder B. Increasing Sepsis Bundle Compliance in an Effort to Improve Health and Cost Outcomes. Institute for Health Care Improvement 30<sup>th</sup> Annual National Forum, December 2018.

Fox J, Abrahams C, Baird J, Mailloux C, Binder W. Morbidity Associated with Human Metapneumovirus in Adults. Warren Alpert Medical School at Brown University Research Forum. November 2020.

Abrahams C, Fox J, Baird J, Mailloux C, Binder W. Evaluating the Epidemiology and Clinical Impact of the Four Endemic Coronaviruses. Warren Alpert Medical School at Brown University Research Forum. November 2020.

Binder W, Abrahams C, Fox J, Nestor E, Baird J. The Age-Old Question: A Delphi Group Analysis of Aging in Emergency Medicine. SAEM21 Virtual Meeting, May 11 – 14, 2021.

Fox J, Abrahams C, Baird J, Mailloux C, Binder W. Morbidity and Mortality Associated with Human Metapneumovirus in Adults. SAEM21 Virtual Meeting, May 11 – 14, 2021.

Abrahams C, Fox J, Baird J, Mailloux C, Binder W. Evaluating the Epidemiology and Clinical Impact of the Four Endemic Coronaviruses. SAEM21 Virtual Meeting, May 11 – 14, 2021.

#### **INVITED PRESENTATIONS**

Formal Teaching of Peers:

1999 – 2014 Emergency Medicine Update

**Individual Presentations** 

HMS CME Boston, MA Course offered twice annually to 12 – 16 physicians

- 1999 Bites and Stings
- 2000 Bites and Stings
- 2000 Emerging Infectious Diseases
- 2001 Envenomations
- 2001 Emerging Infectious Diseases
- 2002 Food Borne Illnesses
- 2002 Needlesticks
- 2003 Food Borne Illnesses
- 2003 Fever in the Traveler
- 2004 Food Borne Illnesses

2004	Fever in the Traveler
2005	Food Borne Illnesses
2005	Fever in the Traveler
2006	Food Borne Illnesses
2006	Fever in the Traveler
2007	'Tis the Season: Influenza Update
2007	Fever in the Traveler
2008	Food Borne Illnesses
2008	Fever in the Traveler
2009	Food Borne Illnesses
2011	The Evaluation of Fever in the Returning Traveler
	Fever in the Returning Traveler
2013	Evaluation of Fever in the Returning Traveler
2014	The Returning Traveler
2014	Ticks: Lyme, Babesia, Ehrlichia and Anaplasma
2001-	
HMS (	CME Boston, MA 100 – 150 attendees
0004	
	Food Borne Illnesses
	Fever in the Traveler
	Emerging Infections
	You've Been Stuck—Now what: an update on Post exposure Prophylaxis
2005	Tis the Season—an update on Influenza
2005.	– 2006 Harvard EM LLSA Review/Harvard Medical School CME course
2005	On line critical summary of literature/test preparation
	West Nile Virus
	Acute Infectious Diarrhea
2011	SAEM CPC finalist discussant: PRES
	Harvard EM: Meningitis: A needle in a haystack. 250 attendees
	Rocky Mountain Wilderness Conference in Emergency Medicine
2013	Breckenridge, Colorado 300 attendees
	Fever in the Returning Traveler
2016	Rocky Mountain Wilderness Conference in Emergency Medicine
2010	Steamboat, Colorado 300 attendees
	Tick Borne diseases in the Returning Traveler
2017	-
2017	Rocky Mountain Wilderness Conference in Emergency Medicine Copper Mountain, Colorado 400 attendees
	* *
	Emerging viruses in the Western Hemisphere: Zika, Chikungunya, Dengue, and Powassan virus
2010	
2018	Impact Nation: Relias Health Care, Cary, North Carolina 600 attendees
	Physician and Nurse Burnout: The new healthcare crisis

Organizational Trends in Emergency Medicine: Triage and Back to the Future
2019 Division of Wilderness Medicine, Massachusetts General Hospital
Dehydration and Metabolism in Extreme Environments
Waterborne Pathogens: Disinfection and Disease

### **LOCAL INVITED PRESENTATIONS**

2001	Heat Stroke	Department of Internal Medicine, MGH Grand Rounds
2001	Heat Stroke	Department of Emergency Medicine, BIDMC Grand Rounds
2013	The Boston N	Marathon Bombing: Massachusetts General Hospital's response.
	Grand Round	ls: Miriam Hospital, Providence, RI
2014	The Boston N	Marathon Bombing: MGH Response. EMS Grand Rounds RIH,
	Providence, l	RI

# **Reviewer/Editorial Activities**

2006 - 2008	Ad Hoc Reviewer	Epidemiology and Infection
2017 - 2018	Reviewer	RI Medical Journal
2018—current	Editor in Chief	RI Medical Journal
	Responsible for producing and organizing issues, choosing and editing content, writing commentary and editorials, and directing editorial board. Issues this past year include: Wilderness medicine and Clima change, Out of Hospital Cardiac Arrest, Update in Trauma, Update in Critical Care Medicine, Infection Control, Tele-Health, and others.	
2020	Ad Hoc Reviewer	Emergency Medicine Journal

### **RESEARCH**

Report of Funded and Unfunded Projects

1991 - 1992 Co-Investigator: Shigella in a Navajo Indian population National Institute of Health/National Institutes of Child Health and Human Development (P.I. John Robbins, MD) 1992 – 1993 Proportional Assist Ventilation in Critical Care patients: A phase I trial. Rhode Island Hospital, Brown University, Providence, RI

2004 – 2009 Bioaerosol Production and Influenza. Co-PI(P.I. Meghan Murray, MD) Pulmatrix Company

Examined aerosolized viral load in influenza patients before and after saline nebulizers and its relationship to transmission.

2005 – 2008 Prevalence of Community Acquired Methicillin Resistant Staphylococcal Aureus (CA-MRSA) in Emergency Department Patients. Co –PI. Examine CA-MRSA cases at MGH and factors associated with prevalence

2005- 2008: Value of CT for patients with non traumatic Abdominal Complaints Co – PI. Examined the utility and costs vs. benefits of Abdominal CT in Emergency Department Patients

2008 – 2009 Are Cervical Spine Plain Film Examinations Useful in Patients with Low Clinical Suspicion of Cervical Spine Fracture. Co-PI Retrospective review of pertinent findings of cervical spine plain films

2008 – 2011 Randomized Trial of Trimethoprim-Sulfamethoxazole versus Placebo Added to Standard Treatment of Uncomplicated Cellulitis in Emergency Department Patients Co-PI

2008 –2009 Immunology and Virology of Influenza Infection. Site PI (P.I. Marcus Altfield). Enrolling patients for study examining CD4 response to acute influenza

2008 – 2011 4 Balance: An Open-Label, Randomized Multicenter, Phase IIIb Study to assess the efficacy, safety, and tolerance of Beriplex Compared with plasma for rapid reversal of coagulopathy induced by Coumadin derivatives in subjects requiring emergency surgery or invasive intervention

Co-investigator (site P.I. Joshua Goldstein)

2007 – 2013 Protocolize Care for Early Septic Shock (Process) Co-Investigator (site P.I. Michael Filbin)

2008 - 2010 Clearview Influenza A and B Test Clinical Trial. P.I. Inverness Medical Innovations, Inc.

2009 –2013 A Phase IV Randomized trial to Determine the Efficacy and Safety of intravenous Cardene versus Labetolol for Management of Hypertensive Emergencies in the Emergency Department Setting. Co-Investigator (site P.I. Pierre Borczuk)

2009 - 2014 VIAP: Violence Intervention Advocacy Program. Site-PI (P.I. Edward Bernstein). Massachusetts State Government sponsored program designed to provide intervention and break the cycle of violence in victims and purveyors of violence

2012-2014 Value of CT: co-PI.

Evaluation of Head, Abdominal, and Chest CT in the Emergency Department, with Pandhapande P, Reisner A. A prospective evaluation of non traumatic brain, chest and abdomen CT scan in 4 institutions.

2012- 2014: Procalcitonin and Pneumonia: co-PI

Evaluation of a marker for severity of disease and length of stay with Mansour M, Vyas J, Lewandrowski K.

2013-2014 Perceptions of Radiology reporting by Emergency Physicians. Co PI with Garry Choy, MD

2013-2015 Thermal Imaging in Pneumonia: Proof of concept study

2014- 2015 RSV in Adults: A review of cases from 2007 – 2014 at a large urban teaching hospital

2020: The Aging Physician in Emergency Medicine

IRB accepted March 2020. Questionnaire examining accommodations for EM

physicians in New England

2020: Impact of non-influenza and non-SARS-CoV-2 respiratory illnesses on ICU

Admissions. IRB accepted March 2020.

2020: COVID-19 and Return visits to the Emergency Department. IRB accepted

September 2020

09/2020-08/2021: Regeneron Pharmaceuticals

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

Grant Number: R10933-10987-COV-2067

Role: Sub-Investigator

06/2020-05/2021: United States Department of Defense

Convalescent Plasma Randomized Clinical Trials for Early COVID-19 Treatment are

Foundational for Subsequent Hyperimmune Globulin and Vaccines

Grant Number: W911QY2090012

Role: Sub-Investigator

### UNIVERSITY TEACHING ROLES

1993-1998 History and Physical Exam for Brown University 1st and 2nd year medical Students 3 hour sessions weekly for 8 weeks

2005-2006 Infection and Immunology (IN704.0). Harvard Medical School Tutorial 1st year medical students 3 hour sessions for 6 weeks

2005 4th year HMS Comp Exam (OSCE) HMS. 2 hour long sessions

2004 - 2014 HMS Medicine 525M. HMS Emergency Medicine Clerkship at MGH. Trauma and Wound Care. 3 hour session. Lecturer 4th year medical students.

2008 – 2014 HMS Principal Clinical Experience: HMS/MGH Longitudinal Case Conference for 3rd year medical students. 3 hour session

### **HOSPITAL TEACHING ROLES**

1994 Spontaneous Bacterial Peritonitis RIH/Brown U. 1 hour seminar. Internal Medicine Residents/Medical Students rotating on ward service

1994 Tuberculosis RIH/Brown U. 1 hour seminar. Internal Medicine Residents/Medical Students rotating on ward service

1994 Cardiomyopathy RIH/Brown U 1 hour seminar Internal Medicine Residents/Medical Students rotating on ward service

1994 The Urinalysis RIH/Brown U. 1 hour seminar Internal Medicine Residents/Medical Students rotating on ward service

1994 Community Acquired Pneumonia RIH/Brown U. 1 hour lecture Internal Medicine Residents/Medical Students rotating on ward service

1998 Myocarditis MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

1998 Endocrine Emergencies MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

1999 Bites and Stings MGH 1 hour lecture

HAEMR(Harvard	<b>Affilliated</b>	<b>Emergency</b>	Medicine	Residency)	Residents

1999 Heat Stroke MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

1999 Oncologic Emergencies MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2000 Heat Stroke MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2000 Infectious Diseases Board Review MGH 1 hour seminar HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2000 Cardiology Board Review MGH 1 hour seminar HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2000 GI Board Review MGH 1 hour seminar HAEMR(Harvard Affiliated Emergency Medicine Residency) Residents

2000 Pediatric Infections in the ED MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2001 Electrical Injuries and Burns MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2001 Cardiology Board Review Part II MGH 1 hour seminar HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2001 Endocrine/Rheumatology Board MGH 1 hour seminar Review
HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2002 Influenza MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2002 Foodborne Diseases MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2002 Pulmonary Board Review MGH 1 hour seminar HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2003 Aortic Dissection MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2003 Neurology Board Review MGH 1 hour lecture HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2003 OB-GYN Board Review MGH 1 hour seminar HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2004 Environmental Emergencies-- MGH 1 hour lecture Sun, Water, Heat

HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2004 NEJM CPC-- MGH 1 hour case Syncope in a 40 year old man

HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents, Fellows, Attendings and invited guests

2005 Influenza MGH 1 hour case HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2005 You've Been Stuck—Now What: MGH 1 hour lecture Post Exposure Prophylaxis

HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2006 ENT Emergencies MGH 1 hour lecture/ 2 hour seminar

HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2006 Arrhythmias MGH 1 hour lecture

MGH Radiology Residents

2007 Urologic Emergencies MGH 1 hour lecture/ 2 hour seminar

HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2009 Thoracic Outlet Syndrome/ MGH 1 hour seminar

Thrombosis

HAEMR(Harvard Affilliated Emergency Medicine Residency) Residents

2009 NEJM CPC: Change in Mental MGH 1 hour case Status and Fever in a 16 year old Girl.

HAEMR (Harvard Affilliated Emergency Medicine Residency) Residents, Fellows, Attendings and invited guests

2010 HAEMR CPC: Fever and a Rash MGH 1 hour case

in a 30 year old man. HAEMR (Harvard Affilliated Emergency Medicine Residency) Residents and Faculty.

2010 HAEMR (Har	Cardiac Emergencies  vard Affilliated Emergency Medicin	MGH ne Residency) Resider	1 hour lecture/ 2 hour seminar and simulation
2011	HAEMR CPC: A 46 year old Woman with Confusion and Fever	MGH	1 hour case
HAEMR (Har	vard Affilliated Emergency Medicin	e Residency) Resider	its and Faculty
2011 HAEMR (Har	Churg Strauss Syndrome: vard Affilliated Emergency Medicin	MGH e Residency) Resider	1 hour seminar ats
	Mock Oral Boards ward Affiliated Emergency Medicine	MGH e Residency) Residen	2.5 hour cases ts
2011-2014	Section on Wilderness Medicine Readings from Auerbach, Textboo Burns, Fire and Radiation Plants: Allergic Reactions, Derma Tick Borne Illnesses Mosquito Borne Illnesses Travel Medicine		14 hours cine
2012	Thrombotic Thrombocytopenic Purpura MGH 1 hour seminar HAEMR (Harvard Affiliated Emergency Medicine Residency)		
2012 - 2014	ACLS: Arhythmia		1 hour seminar
2013	Babesiosis	MGH	1 hour seminar
2014	Tick Borne Illness	MGH	1 hour seminar
2014	Takotsubo Cardiomyopathy	MGH	1 hour seminar
2014	Myasthenia Gravis	MGH	1 hour seminar
2014	Takotsubo Cardiomyopathy	Brown University	1 hour seminar
2015	Chikengunya and Dengue Fever	Brown University	30 minute rounds

2015	Common Ski Injuries	Brown University	30 minute rounds
2015	Testicular Torsion	Brown University	30 minute rounds
2015	Mock Oral Boards	Brown University	3 hour session
2016	Rickettsial Diseases: African Tick Bite Fever	Brown University	30 minute rounds
2016	Arthropod Borne Diseases	MGH Wilderness Medicine Fellowship	2 hour seminar
2016	Hypothermia	Brown University	3 hour simulation
2016	Hypothermia	Brown University	30 minute rounds
2016	RSV in Adults	Brown University	30 minute rounds
2017	Triage in the ED	Brown University EM Residency	60 minutes
2018	Oral Board Preparation	Brown University EM Residency	3 hours
2018-2019	20 minute Rounds: Topics include Coronary Artery Dissection, Triage in the ED, Clavicle Fractures, Ski injuries, Babesiosis, RSV and Mortality	Brown University EM Residency	2 hours
2019	Oral Board Preparation	Brown EM Residence	ry 3 hours
2019	Non-Atherosclerotic ACS	Brown University EM Residency	1 hour
2020	Oral Board Preparation	Brown University EM residency	3 hours
2020	Hematemesis	Brown EM Residenc	y 1 hour
2020	Altitude Sickness	Brown EM Residenc	y 1 hour

2021 2021	Oral Board Preparation Transvenous PM Simulation	Brown EM Residency 3 hours Brown EM Residency 3 hours	
COMMUNIT	Y TEACHING ROLES		
2014	Disaster in Emergency Medicine	Moses Brown High School	
2015	Disaster in EM: The Station Night Club Fire and Boston Marathon Bombing	Moses Brown High School	
2016	Disaster in EM: The Station Night Club Fire and Boston Marathon Bombing	Moses Brown High School	
2016	Emergency Medicine	Wheeler High School	
2017	Emergency Medicine	Wheeler High School	
2017	Disaster in EM: The Station Night Club Fire and Boston Marathon Bombing	Moses Brown High School	
2018	Triage and disaster medicine: The Station Night Club Fire and Boston Marathon Bombing	•	
2020	Covid-19 Questions Multiple television appearances answering questions regarding Covid-19	RI PBS Kids	
2021	Covid-19 Update	RI PBS Kids	