

Zachary M. Bauman, DO, MHA, FACOS, FACS

CHARACTERISTICS

- Excellent interpersonal skills
- Motivated and willing to meet challenges, academically and personally
- Driven with an enthusiasm for daily learning
- Compassionate person who is strongly committed to the well being of others
- Dedicated to the community and to maintaining personal relationships

CURRENT PROFESSIONAL EMPLOYEMENT

University of Nebraska Medical Center

August 2016 – Present

- Board Certified General/Trauma Surgeon
- Board Certified Critical Care Surgeon
- Assistant Professor of Surgery
Division of Emergency General Surgery, Trauma, Burns and Critical Care Surgery

EDUCATION

Trauma and Acute Care Surgery Fellowship

July 2015 – June 2016

- University of Arizona

General Surgery Residency

July 2009 – July 2015

Henry Ford Macomb Hospitals – In Association with Michigan State University

- Qualifying Written General Surgery Board Exam: Pass – October 2015
- Certifying Oral General Surgery Board Exam: Pass – September 2016

Surgical Critical Care Fellowship

July 2012 – June 2013

Henry Ford Hospital – Detroit, Michigan

- Board Certification Exam in Surgical Critical Care: Pass - November 2013

Doctor of Osteopathic Medicine

August 2005 - July 2009

Des Moines University—College of Osteopathic Medicine and Surgery (COMS)

- COMLEX Level 1: Pass - June 2007
- USMLE Level 1: Pass – July 2007
- COMLEX Level 2: Pass – October 2008
- Clinical Skills Board Exam: Pass – December 2008
- COMLEX Level 3: Pass – May 2010

Masters in Healthcare Administration

August 2006 - May 2010

Des Moines University – College of Health Sciences

B.S. University of Nebraska, Lincoln, Nebraska

August 2004

- Major: Biochemistry
- Minors: Mathematics and Chemistry
- Research: Regulation of the human enzyme Cystathionine Beta Synthase and the metabolism of homocysteine

High School Diploma

May 1999

East High School, Sioux City, IA

- Valedictorian

PROFESSIONAL LICENSURE AND CERTIFICATIONS:

- US GRADE Training - 2018
- Rural Trauma Team Development Course Instructor - 2017
- Stop the Bleed Course Instructor - 2017
- ABLIS Certified - 2016
- ATLS Instructor/Director – 2016
- Advanced Surgical Skills for Exposure in Trauma – 2016
- PALS Certified – 2016
- Qualifying Written General Surgery Board Exam: Pass – October 2015
- Certifying Oral General Surgery Board Exam: Pass – September 2016
- Surgical Critical Care Board Certified – November 2013
- Nebraska Physician License - NPI Number: 1538390026
- Arizona and Michigan Physician License (Educational Limited) – NPI Number: 1538390026
- ACLS/BLS Certified - 2017
- ATLS Certified – 2013
- Fundamentals of Critical Care Medicine Instructor – 2012 to present
- International Point of Care Ultrasound Instructor – 2013 - 2015

PUBLISHED MANUSCRIPTS

29. Sarani B, Allen R, Pieracci FM, Doben AR, Eriksson E, **Bauman ZM**, Gupta P, Semon G, Greiffenstein P, Chapman AJ, Kim BD, Lottenberg L, Gardner S, Marasco S, White T. Characteristics of hardware failure in patients undergoing surgical stabilization of rib fractures: A Chest Wall Injury Society multicenter study. *J Trauma Acute Care Surg.* 2019. Doi:10.1097/TA.
28. **Bauman ZM**, Morizio K, Singer M, Hood CR, Feliciano DV, Vercruyse GA. The Heroin Epidemic in America: A Surgeon's Perspective. *Surg Infect.* 2019. Doi:10.1089/sur.2019.004.
27. Schlitzkus LL, Waibel BH, Um J, **Bauman ZM**. Don't Break My Heart: A Case Series Report of Acute Traumatic injury in Left Ventricular Assist Device (LVAD) Patients. *Sur Res Rep.* 2018;1(1):1–4.
26. Wang LL, **Bauman ZM**. Hemosuccus Pancreatitis: A Rare Bleeding Pseudoaneurysm of the Inferior Pancreaticoduodenal Artery Treated with Embolization. *Case Rep in Surg.* 2018 Sep 2;2018:2354169.
25. **Bauman ZM**, Evans CH. Volvulus. *Surg Clin North Am.* 2018;98(5):973-993.
24. **Bauman ZM**, Cemaj S, Schlitzkus LL. Taking the bull by the horns: Patient trampled by bull requiring surgical fixation of multiple rib fractures including rib 11. *Trauma Case Reports.* 2018;16:12-15.
23. Vercruyse GA, **Bauman ZM**, Hennemeyer CT, Devis P, Rhee P. Man Lured with Alcohol, Takes Bait, and Gets Caught: A Cautionary Fish Tail. *Am Surg.* 2018;84(2):e85-86.
22. **Bauman ZM**, Kulvatunyou N. 14-French pigtail catheters for traumatic hemothorax/hemopneumothorax: Size does not matter: Reply. *World J Surg.* 2018. doi: 10.1007/s00268-018-4508-y.
21. Brown CVR, Teixeira PG, Furay E, Sharpe JP, Musonza T, Holcomb J, Bui E, Bruns B, Hopper HA, Truitt MS, Burlew CC, Schellenberg M, Sava J, VanHorn J, Eastridge B, Cross AM, Vasak R, Vercruyse G, Curtis EE, Haan J, Coimbra R, Bohan P, Gale S, Bendix PG, Lewis RH, Todd SR, Hicks RE, Victorino G, Scalea T, Guillaumondegui O, Agrawal V, Coleman JR, Inaba K, Martin M, McCarthy CK, Kim D, **Bauman ZM**, Galante J, Lightwire K, Schreiber M, Allen L, Okafor BU. Contemporary management of rectal injuries at Level I

Trauma Centers: The results of an American Association for the Surgery of Trauma multi-institutional study. *J Trauma Acute Care Surg.* 2018;84(2):225-233.

20. Vercruysse GA, **Bauman ZM**, Roman J, Rhee PM, Moore EE. Challenges in Acute Care Surgery Shootout at the O.K. Corral – History Revisited. *J Trauma Acute Care Surg.* 2017;83(5):981-983.
19. **Bauman ZM**, Kulvatunyou N, Joseph B, Jain A, Friese RS, Gries L, O’Keeffe T, Tang AL, Vercruysse G, Rhee P. A Prospective Study of 7-Year Experience Using Percutaneous 14-French Pigtail Catheters for Traumatic Hemothorax/Hemopneumothorax at a Level-1 Trauma Center: Size Still Does Not Matter. *World J Surg.* 2018;42(1):107-113.
18. **Bauman ZM**, Ruggero JM, Squindo S, McEachin C, Jaskot M, Ngo W, Barnes S, Lopez PP. Repeat Head CT? Not necessary for patients with a negative initial head CT on Anticoagulation or antiplatelet therapy suffering low-altitude falls. *Am Surg.* 2017;83(5):429-435.
17. **Bauman ZM**, Roman J, Singer M, Vercruysse GA. Canary in the Coal Mine – Initial Reports of Thermal Injury Secondary to electronic Cigarettes. *Burns.* 2017;43(3):e38-e-42.
16. **Bauman ZM**, Hood CR, Windell E, Vercruysse GA. Hidradenitis Suppurative: A Radical Cure for a Patient with a Malignant Course. *Am Surg.* 2016;82(12):371-373.
15. Joseph B, Azim A, Zangbar B, **Bauman ZM**, O’Keeffe T, Ibraheem K, Kulvatunyou N, Tang A, Latifi R, Rhee P. Improving mortality in trauma laparotomy through the evolution of damage control resuscitation: Analysis of 1,030 consecutive trauma laparotomies. *J Trauma Acute Care Surg.* 2017;82(2):328-333.
14. **Bauman ZM**, Gassner MY, Coughlin MA, Mahan M, Watras J. Airway Pressure Release Ventilation Does Not Protect Against the Development of Acute Respiratory Distress Syndrome in Surgical Critical Care Patients. *J Med Prac & Review.* 2016;4:40-54.
13. **Bauman ZM**, Azim A, Latifi R, Joseph B. Advancing Trauma and Emergency Education Through Virtual Presence. *Curr Trauma Rep.* 2016;2:124-131.
12. Joseph B, Ibraheem K, Haider AA, Kulvatunyou N, Tang A, O’Keeffe T, **Bauman ZM**, Green DJ, Latifi R, Rhee P, MD. Identifying potential utility of REBOA: An autopsy study. *J Trauma Acute Care Surg.* 2016; 81(5 suppl 2):S128-S132.
11. **Bauman Z**, Coba V, Gassner M, Amponsah D, Gallien J, Blyden D, Killu K. Inferior vena cava collapsibility loses correlation with internal jugular vein collapsibility during increased thoracic or intra-abdominal pressure. *J Ultrasound.* 2015;18(4):343-8.
10. **Bauman ZM**, Gassner MY, Coughlin MA, Mahan M, Watras J. Lung injury prediction score is useful in predicting acute respiratory distress syndrome and mortality in surgical critical care patients. *Crit Care Res Prac.* 2015;2015:157408. doi: 10.1155/2015/157408.
9. **Bauman Z**, Nanagas V Jr. The combination of gastrochisis, jejunal atresia, and colonic atresia in a newborn. *Case Rep Pediatr.* 2015;2015:129098. doi: 10.1155/2015/129098.
8. **Bauman Z**, Ruggero J, Lim J. Gallbladder volvulus presenting as acute appendicitis. *Case Reports in Surgery.* 2015;2015:629129. doi: 10.1155/2015/629129.
7. Gassner M, Killu K, **Bauman Z**, Coba V, Rosso K, Blyden D. Feasibility of common carotid artery point of care ultrasound in cardiac output measurements compared to invasive methods. *J Ultrasound.* 2014;18(2):127-133.

6. Gassner M, **Bauman Z**, Parish S, Koenig C, Martin J, Hans S. Hemodynamic changes in patients undergoing Carotid Endarterectomy under Cervical Block and General Anesthesia. *Ann Vasc Surg.* 2014;28(7):1680-1685.
5. **Bauman ZM**, Killu KF, Rech MA, Bernabei-Combs JL, Gassner MY, Coba VE, Tovbin A, Kunkel PL, Mlynarek ME. Racial differences in vasopressor requirements for septic shock. *Shock.* 2014;41(3):188-192.
4. **Bauman Z**, Lim J. Pneumoperitoneum as a result of a ruptured splenic abscess. *Journal of Surgical Case Reports.* 2013;2013(12):rjt111-rjt111.
3. Anna Prudova, Matthias Albin, **Zachary Bauman**, Alexander Lin, Victor Vitvitsky and Ruma Banerjee, Testosterone Regulation of Homocysteine Metabolism Modulates Redox Status in Human Prostate Cancer Cells. *Antioxidants and Redox Signaling.* 2007;9(11):1875-81.
2. Prudova A, **Bauman Z**, Braun A, Vitvitsky V, Lu SC, Banerjee R. S-adenosylmethionine stabilizes cystathionine beta-synthase and modulates redox capacity. *Proceedings of the National Academy of Sciences of the United States of America.* 2006;103(17):6489-6494.
1. Zhang W, Braun A, **Bauman Z**, Olteanu H, Madzelan P, Banerjee R. Expression profiling of homocysteine junction enzymes in the NCI60 panel of human cancer cell lines. *Cancer Research.* 2005;65(4):1554-1560.

PUBLISHED TEXTBOOK CHAPTERS

- Evans, C, **Bauman, Z.M.**, Cooper, C., Capella J.M. (2019). Chapter 5: Surgical Shock. In P.F. Lawrence (Ed.), *Essentials of General Surgery and Surgical Specialties Sixth Edition* (47-55). Wolters Kluwer.
- Waibel. B.H., **Bauman, Z.M.**, Rotondo, M.F. (2019). Chapter 10: Damage Control Management/Open Abdomen. In L.D. Britt (Ed.), A.B. Peitzman (Ed.), P.S. Barie (Ed.) & G.J. Jurkovich (Ed.), *Acute Care Surgery Second Edition.* Wolters Kluwer (99-112).
- Bauman, Z.M.**, Joseph, B., Latifi, R. (2017). Chapter 4: Nutritional Consideration of Patients with Open Abdomens and Fistulas. In R. Latifi (Ed.), *Surgery of Complex Abdominal Wall Defects: Practical Approaches Second Edition* (17-26). Springer.
- Bauman, Z.M.**, O'Keeffe, T. (2016). Chapter 12: Intensive Care: Principles and Therapy. In G.C. Velmahos (Ed.), E. Degiannis (Ed.) & D. Doll (Ed.), *PENETRATING TRAUMA: A Practical Guide on Operative Technique and Peri-Operative Management Second Edition* (85-92). Springer.
- Bauman, Z.M.**, Lineen, E.B., Lopez, P.P. (2016). Chapter 46: Enterocutaneous Fistulas. In S.M. Cohn (Ed.), M.O. Dolich (Ed.) & K. Inaba (Ed.), *Acute Care Surgery and Trauma: Evidence-Based Practice Second Edition* (383-390). Boca Raton, FL: CRC Press.

PUBLISHED ABSTRACTS and ACTIVE RESEARCH

- Zachary M. Bauman**, Alex Hodson, Ashely Farrens, Valerie Shostrom, Jessica Summers, Lisa Schlitzkus. Rural Trauma Team Development Course Instills Confidence in Critical Access Hospitals. *14th Annual Academic Surgical Congress.* 2019.
- Zachary M. Bauman**, Robert Cunningham, Alex Hodson, Valerie Shostrom, Charity Evans, Lisa Schlitzkus. Emergency General Surgery (EGS) Operations in Patients with Left Ventricular Assist Devices (LVADs). *14th Annual Academic Surgical Congress.* 2019.

Zachary M. Bauman, Narong Kulvatunyou, Bellal Joseph, Lynn Gries, Randall Friese, Terence O'Keeffe, Andrew Tang, Peter Rhee. Randomized Clinical Trail of 14-French (14Fr) Pigtail Catheters versus 28-32Fr Chest Tubes in the Management of Patients with Traumatic Hemothorax and Hemopneumothorax. *32nd Annual Eastern Association for the Surgery of Trauma*. 2019.

Zachary M. Bauman, Ujwal Yanala, Gautam Malhotra, Samuel Cemaj, Lisa Schlitzkus. Sternal fixation for Traumatic Sternal Fractures Improves Pain and Upper Extremity Range of Motion. *American College of Surgeons Clinical Congress*. 2018.

Zachary Bauman, Narong Kulvatunyou. A prospective study of 7-year experience of using percutaneous 14-French pigtail catheter for traumatic hemothorax at a level 1 trauma center – size still does not matter. *30th EAST Annual Scientific Meeting*. 2017.

John Ruggero, **Zachary Bauman**, Scott Barnes, Peter Lopez. Are Advanced Age Patients on Anticoagulation or Antiplatelet Therapy Who Suffer Low-Altitude Falls More Likely to Benefit From Repeat Head Computed Tomography? *American College of Surgeons Annual Conference*. 2016.

Zachary Bauman, John Ruggero, Sunny Squindo, Chris McEchin, Michelle Jaskot, Will Ngo, Scott Barnes, Peter Lopez. Repeat head computed tomography is not necessary for patients on anticoagulation of antiplatelet therapy who suffer low altitude falls. *74th Annual Meeting of the American Association for the Surgery of Trauma and Clinical Congress of Acute Care Surgery*. 2015.

Zachary Bauman, Marika Gassner, Harriette Horst, Dionne Blyden, Ryan Kather, Ilan Rubinfeld. Cause of Surgical Mortality: Is it Pathology or Hospital Harms? *Critical Care Medicine*. 2013;41(12 Supp).

Zachary Bauman, Marika Gassner, Jill Watras. Lung Injury Prediction Scores Use in Acute Respiratory Distress Syndrome and Mortality Estimates. *Critical Care Medicine*. 2013;41(12 Supp).

Zachary Bauman, Harriette Horst, Jill Watras. Application of the Berlin Definition in the Surgical Population. *Critical Care Medicine*. 2013;41(12 Supp).

Zachary Bauman, Marika Gassner, Harriette Horst, Jill Watras. Use of Airway Pressure Release Ventilation in Acute Respiratory Distress Syndrome. *Critical Care Medicine*. 2013;41(12 Supp).

Zachary Bauman, Dana Hommel, Marika Gassner, Harriette Horst, Dionne Blyden, Ilan Rubinfeld. Older Trauma Patients have a Greater Risk of Inpatient Harms. *Critical Care Medicine*. 2013;41(12 Supp).

Marika Gassner, Keith Killu, **Zachary Bauman**, Victor Coba, Kelly Rosso, Dionne Blyden, Harriette Horst. Carotid Artery Point-Of-Care Ultrasound Measuring Cardiac Output. *Critical Care Medicine*. 2013;41(12 Supp).

Zachary Bauman, DO; Mathilda Horst, MD; Dionne Blyden, MD; Jeffrey Morgan, MD. A Rare Case of Massive Chondrosarcoma Pulmonary Embolism. *Chest*. 2013;144(4_MeetingAbstracts):633A. doi:10.1378/chest.1704902

Zachary Bauman, Victor Coba, Marika Gassner, John Galien, David Amponsah, Keith Killu. Inferior Vena Cava Collapsibility Loses Correlation with Internal Jugular Vein Collapsibility during Increased Thoracic or Intra-Abdominal Pressure. *Critical Care Medicine*. 2012; 40(Supplement 1 12):pp. C1-C4,i-vi,1-5.

Sean McMillan, **Zachary Bauman**, Harriette Horst, Marika Gassner, Dionne Blyden, Zeeshan Syed, Ilan Rubinfeld. Computational Prediction of Atrial Fibrillation in the ICU using Early Admission Vital Signs Data. *Critical Care Medicine*. 2012; 40(Supplement 1 12):pp. C1-C4,i-vi,1-5.

Sean McMillan, Marika Gassner, Harriette Horst, **Zachary Bauman**, Dionne Blyden, Zeeshan Syed, Ilan Rubinfeld. Predicting Mortality in the ICU Through the Application of Machine Learning to Routinely Collected Clinical Data. *Critical Care Medicine*. 2012; 40(Supplement 1 12):pp. C1-C4,i-vi,1-5.

PROFESSIONAL PRESENTATIONS

GUEST LECTURES

- Emergency Medicine Grand Rounds University of Nebraska Medical Center – Omaha, NE: “Chest Wall Trauma – A Change in Perspective.” August 15th, 2019.
- Keynote Speaker for Methodist Hospital Emergency Medicine weekly Ground Rounds: “Chest Wall Trauma – A Change in Perspective.” June 26th, 2019 Omaha, NE.
- Keynote Speaker for Dennison, IA Hospital Monthly Trauma Performance Improvement Conference; “Chest Wall Trauma – A Change in Perspective.” June 24th, 2019.
- University of Nebraska Medical Center General Surgery Intern Boot Camp: Taught intubation, cricothyroidotomy, tracheostomy and paracentesis procedures. June 24th, 2019.
- Keynote Speaker for Jenny Edmundson Hospital Monthly Trauma Performance Improvement Conference; “Chest Wall Trauma – A Change in Perspective.” June 4th, 2019.
- Rural Emergency Medicine Course: “Initial Assessment of the Trauma Patient.” University of Nebraska Medical Center. April 18th, 2019.
- Surgical Boot Camp for 4th Year Medical Students: “Instrumentation Identification and Suture Lab – April 10th and 15th, 2019
- Chest Wall Injury Society Round Table Presentations: “Surgical Stabilization of Rib Fractures Guideline Review” – Chest Wall Injury Society Summit, Santa Fe, NM. March 28th, 2019.
- Keynote Speaker for Harlan, IA Monthly Trauma Performance Improvement Conference; “Chest Wall Trauma – A Change in Perspective.” January 29th, 2019.
- GRADE Training Course Educator at the 32nd Annual Eastern Association for the Surgery of Trauma Conference, Austin, TX, 2019.
- Keynote Speaker for the Great Plains Regional Trauma Conference (provided two lectures); “Chest Wall Trauma – A Change in Perspective” and “Abdominal Trauma – The Way We Think.” October, 3rd, 2018.
- General Surgery Grand Rounds South Pointe Hospital – Cleveland Clinic: “Traumatic Brain Injury.” August 30th, 2018.
- Third-year Medical Student Surgical Lecture: “Skin and Soft Tissue.” July 27th, November 30th, 2018.
- Nebraska Statewide Telehealth Network Lecture: “Chest Wall Trauma – A Change in Perspective.” University of Nebraska Medical Center. July 10th, 2018.
- University of Nebraska Medical Center General Surgery Resident Boot Camp: Taught intubation, cricothyroidotomy, tracheostomy and paracentesis procedures. June 26th, 2018.
- University of Nebraska Medical Center Trauma Symposium. “Optimizing the Potential Organ Donor.” May 1st, 2018.
- Papillon-La Vista South High School, Papillon, NE. Ran a mock trauma drunk driving car crash scenario in front of the student body for prom week. April 20th, 2018.
- University of Nebraska Medical Student Center Surgical Boot Camp. Taught vascular access and fasciotomies on cadavers. April 17th, 2018.
- Harry Anderson Middle School, Omaha, NE. “Life as a Trauma Surgeon.” April 9th, 2018.
- Rush University Medical Center Guest Educator. Taught fellow trauma surgeons how to perform surgical stabilization of rib fractures in a cadaver lab. April 5th, 2018.

- Oakland, Nebraska Peer Review. Presented two case studies of trauma patients sent to us from their hospital. March 19th, 2018.
- General Surgery Grand Rounds – University of Nebraska Medical Center. “My Achy Breaky Heart: What’s New in Cardiothoracic Surgery.” January 31st, 2018.
- University of Nebraska Medical Center New SICU Nurse Orientation. “Critical Care Management of the Trauma Patient.” December 28th, 2017.
- University of Nebraska Medical Center Pulmonary Critical Care Fellow Education. “In-Hospital Management of the Trauma Patient.” December 18th, 2017.
- Cardiothoracic Ground Rounds – University of Nebraska Medical Center. “What’s New is Cardiothoracic Trauma.” December 13th, 2017.
- University of Nebraska Medical Center New SICU Nurse Orientation. “Critical Care Management of the Trauma Patient.” October 19th, 2017.
- University of Nebraska Medical Center Trauma Symposium. “The Case of the Bloody Pencil: Chest Hemorrhage and What’s Important.” October 17th, 2017
- Rural Emergency Medicine Course: “Initial Assessment of the Trauma Patient.” University of Nebraska Medical Center. April 20th, 2017.
- Surgical Boot Camp for 4th Year Medical Students: “Chest Tube Placement.” University of Nebraska Medical Center. April 7th, 2017.
- Nebraska Statewide Telehealth Network Lecture: “Advancing Trauma and Emergency Education Through Virtual Presence.” University of Nebraska Medical Center. February 14th, 2017.
- Case Presentation: “Canary in the Coal Mine – Initial Reports of Thermal Injury Secondary to Electronic Cigarettes.” Midwest Region Burn Conference: Advancing Wound Care for the Burn Patient, Omaha, NE, October 6-7, 2016.
- Nebraska State Case Presentation: “10-year-old male with pencil stab wound to zone 1 of the neck.” 39th Annual Advances in Trauma Meeting/American College of Surgeons Committee on Trauma Region 7, Kansas City, MO, December 2-3, 2016.

RESEARCH – ORAL PRESENTATION

- **Zachary M. Bauman**, Benjamin Grams, Lisa Schlitzkus, Ujwal Yanala, Valerie Shostrom, Brett Waibel. Rib Fracture Displacement Worsens Over Time. *Chest Wall Injury Summit 2019*.
- **Zachary M. Bauman**, Alex Hodson, Ashely Farrens, Valerie Shostrom, Jessica Summers, Lisa Schlitzkus. Rural Trauma Team Development Course Instills Confidence in Critical Access Hospitals. *14th Annual Academic Surgical Congress*. 2019.
- **Zachary M. Bauman**, Robert Cunningham, Alex Hodson, Valerie Shostrom, Charity Evans, Lisa Schlitzkus. Emergency General Surgery (EGS) Operations in Patients with Left Ventricular Assist Devices (LVADs). *14th Annual Academic Surgical Congress*. 2019.
- **Zachary M. Bauman**, Narong Kulvatunyou, Bellal Joseph, Lynn Gries, Randall Friese, Terence O’Keeffe, Andrew Tang, Peter Rhee. Randomized Clinical Trial of 14-French (14Fr) Pigtail Catheters versus 28-32Fr Chest Tubes in the Management of Patients with Traumatic Hemothorax and Hemopneumothorax. *32nd Annual Eastern Association for the Surgery of Trauma*. 2019.
- Benjamin Grams, Lisa Schlitzkus, Ujwal Yanala, Valerie Shostrom, Brett Waibel, **Zachary M. Bauman**. Rib Fracture Displacement Worsens Over Time. Resident Trauma Paper Competition at the 41st Annual Advances in Trauma Meeting/American College of Surgeons Committee on Trauma Region 7, Kansas City, MO, December 2018.
- **Zachary M. Bauman**, Ujwal Yanala, Gautam Malhotra, Samuel Cemaj, Lisa Schlitzkus. Sternal fixation for Traumatic Sternal Fractures Improves Pain and Upper Extremity Range of Motion. *American College of Surgeons Clinical Congress*. 2018.
- Loftus J, Schlitzkus LL, Summers J, Emmel A, Hodson A, Shostrom V, **Bauman ZM**. Rural Trauma Team Development Course (RTTDC) Instills Confidence in Critical Access Hospitals. Resident Trauma Paper Competition at the 40th Annual Advances in Trauma

Meeting/American College of Surgeons Committee on Trauma Region 7, Kansas City, MO, December 2017.

- **Zachary Bauman**, Narong Kulvatunyou. A prospective study of 7-year experience of using percutaneous 14-French pigtail catheter for traumatic hemothorax at a level 1 trauma center – size still does not matter. *30th EAST Annual Scientific Meeting*. 2017.
- Hernandez H, Tracey E, Evans CH, **Bauman ZM**, Summers JI, Thompson C, Shostrom V, Waibel BH, Schlitzkus LL. How Well Can We Rise After Falling? The Factors Involved in the Undertriage of Falls. Resident Trauma Paper Competition at the 39th Annual Advances in Trauma Meeting/American College of Surgeons Committee on Trauma Region 7, Kansas City, MO, December 2016
- John Ruggiero, **Zachary Bauman**, Scott Barnes, Peter Lopez. Are Advanced Age Patients on Anticoagulation or Antiplatelet Therapy Who Suffer Low-Altitude Falls More Likely to Benefit From Repeat Head Computed Tomography? *American College of Surgeons Annual Conference*. 2016.
- Repeat head computed tomography is not necessary for patients on anticoagulation of antiplatelet therapy who suffer low altitude falls – American College of Osteopathic Surgeons: October 2015
- Older Trauma Patients have a Greater Risk of Inpatient Harms – American College of Osteopathic Surgeons: September 2014.
- Application of the Berlin Definition for ARDS in the Surgical Population. – Detroit Surgical Association: August 2014
- Lung Injury Prediction Scores Use in Acute Respiratory Distress Syndrome and Mortality Estimates. – Detroit Surgical Association: January 2014
- Cause of Surgical Mortality: Is it Pathology or Hospital Harms? – Society of Critical Care Medicine: January 2014
- Computational Prediction of Atrial Fibrillation in the ICU using Early Admission Vital Signs Data – The International Patient Safety Symposium: December 2013
- Older Trauma Patients have a Greater Risk of Inpatient Harms – Michigan Chapter of the American College of Surgeons: May 2013

RESEARCH – POSTER PRESENTATION

- Thompson CM, Schlitzkus LL, Hernandez H, Tracey E, Evans CH, **Bauman ZM**, Summers JI, Shostrom V, Waibel BH. How Well Can We Rise After Falling? The Factors Involved in the Undertriage of Falls. Presented at Society of Trauma Nurses Annual Meeting, Portland, OR, March 2018.
- Thompson CM, Schlitzkus LL, Hernandez H, Tracey E, Evans CH, **Bauman ZM**, Summers JI, Shostrom V, Waibel BH. How Well Can We Rise After Falling? The Factors Involved in the Undertriage of Falls. Presented at Poster Session at American College of Surgeons Trauma Quality Improvement Program, Chicago, IL, November 2017.
- A prospective study of 7-year experience using 14-French pigtail catheters for traumatic hemothorax at a Level 1 trauma center: size still does not matter – University of Arizona Research Symposium: May 2016.
- Gallbladder volvulus presenting as acute appendicitis – American College of Osteopathic Surgeons: October 2015.
- Repeat head computed tomography is not necessary for patients on anticoagulation of antiplatelet therapy who suffer low altitude falls – American Association for the Surgery of Trauma: September 2015.
- Lung Injury Prediction Scores Use in Acute Respiratory Distress Syndrome and Mortality Estimates – Society of Critical Care Medicine: January 2014
- Older Trauma Patients have a Greater Risk of Inpatient Harms – Society of Critical Care Medicine: January 2014
- Application of the Berlin Definition for ARDS in the Surgical Population - Society of Critical Care Medicine: January 2014
- Use of Airway Pressure Release Ventilation in Acute Respiratory Distress Syndrome - Society of Critical Care Medicine: January 2014
- A Rare Case of Massive Chondrosarcoma Pulmonary Embolism – Chest: October 2013

- Inferior Vena Cava Collapsibility Loses Correlation with Internal Jugular Vein Collapsibility during Increased Thoracic or Intra-Abdominal Pressure - Society of Critical Care Medicine: January 2013
- Computational Prediction of Atrial Fibrillation in the ICU using Early Admission Vital Signs Data – Society of Critical Care Medicine: January 2013
- Probiotic Supplementation in Critical Care – Society of Critical Medicine: January 2013

INTERVIEWS

- Research titled “Cause of Surgical Mortality: Is it Pathology or Hospital Harms?” featured as cover story for the monthly newspaper *General Surgery News*, March 2014;41(3). Story was titled “Surgical Patients Show Higher Mortality from Hospital Harms” by Ben Guarino.

LEADERSHIP

- **Trauma Medical Director, Nebraska Medicine**, September - 2019-Present
- **Nebraska State Region 1 Trauma Advisory Board Member** – 2019
- **Executive Council Member – Chest Wall Injury Society** – 2019
- **Chairman for the Membership Committee – Chest Wall Injury Society** – 2019
- **Program Director for “Hernia Help” Omaha Program** – 2019
- **Patient Outcomes Committee Member University of Nebraska Medical Center** - 2018
- **Core Event Review Team (CERT) Member University of Nebraska Medical Center**- 2018
- **Ethics Committee Member University of Nebraska Medical Center** – 2018.
- **Chairman for the Publications and Guidelines Committee – Chest Wall Injury Society:** 2018. Develop guidelines for the management of chest wall trauma. Also promote the mission of the Chest Wall Injury Society through various publications.
- **Board of Directors Member: Division of Examiners for the American Osteopathic Board of Surgery:** 2018. Create written and oral board exams for the osteopathic general surgeons and critical care surgeons.
- **Guidelines Committee Member – Eastern Association for the Surgery of Trauma:** 2018. Create new trauma, emergency general surgery, surgical critical care and injury prevention management guidelines through the Eastern Association for the Surgery of Trauma.
- **University of Nebraska Medical Center Medical Director Trauma Unit:** 2017 - Present. Improve patient management within the trauma patient unit.
- **Research Committee Member – Chest Wall Injury Society:** 2017 – Present. Develop research projects through the Chest Wall Injury Society related to the management of patients with chest wall trauma.
- **University of Nebraska Medical Center Central Line-Associated Bloodstream Infection Surgeon Champion:** 2017 - Present. In charge of working to reduce CLABSI rates among all surgical specialties.
- **Team Education Leader for 3rd/4th Year Medical Students at University of Nebraska Medical Center:** 2017 - Present. In charge of evaluating and organizing 3rd and 4th year medical students rotating on our service.
- **University of Nebraska Medical Center Trauma Performance Improvement and Patient Safety Committee:** 2016 – Present. Multi-disciplinary committee to improve care and safety of the traumatically injured patient.
- **Nebraska Medicine Multi-Disciplinary Trauma Peer Review Committee:** 2016 – Present. Review all trauma patient morbidities and mortalities to improve trauma patient care and find better ways to prevent morbidity/mortality.
- **Nebraska State Trauma Designation Committee:** 2016 – Present. Review hospitals throughout the state of Nebraska evaluating them for their state trauma designation.
- **Trauma Fellow:** 2015 – 2016
- **Chief Surgical Resident:** 2014-2015.
- **Manuscript Reviewer for the New England Journal of Medicine:** 2013 – 2015.

- **Surgical Peer Review Committee** at Henry Ford Macomb Hospital, 2014-2015. Review surgical cases on a monthly basis to further improve upon patient care at our institution.
- **Critical Care Committee** at Henry Ford Macomb Hospital, 2014-2015. Review patient care provided in the ICU to learn from mistakes and develop ways to improve upon evidence based efficient care for critically ill patients.
- **Super-User for Implementation of EPIC EMR** at Henry Ford Macomb Hospital, 2014.
- **Trauma Performance Improvement and Patient Safety Committee Member** at Henry Ford Macomb Hospital, 2010 – 2015: Provide a resident perspective on helping to establish a Level II Trauma Center at Henry Ford Macomb Hospital – Clinton Township. Work closely with the trauma program director to help establish protocols to improve the management of trauma patients. Also serve as a liaison between the surgical residents and trauma committee to improve the efficiency and patient care provided by the trauma department.
- **Medical Student Education Development**, 2010 – present: Developed a new medical student education curriculum providing a more well rounded educational experience for medical students while on their surgical rotation. Also developed a more advanced surgical education curriculum for those students interested in participating in a surgical residency.
- **Central Line Certification Committee**, 2010 – 2015: Developed a central line placement course with a skills lab that interns must first pass prior to being allowed to place central lines in patients.
- **Associate Clinical Faculty Member Candidate within the Michigan State University College of Osteopathic Medicine**, 2010 - 2015: Work closely with Michigan State University osteopathic students to further them in the field of surgery. If appointed a faculty member, I would like to provide more formal lectures at Michigan State University.
- **President of the American College of Osteopathic Family Physicians**, Des Moines University Student Chapter, 2006-2007: coordinated and helped organize all club events including membership drives, National Osteopathic Month week, Community OMM Nights, Grand Rounds, Wesley Acres Retirement Center Fun Days, Bone Marrow Drives, Blood Glucose Screenings to the public, Osteopathic Awareness Conference, and numerous fundraisers.
- **Iowa Chapter of the American College of Osteopathic Family Physicians Student Statewide Liaison**, 2005-2006: provided student perspective to the Board of Trustees and presented updates on student activities at Des Moines University
- **National Liaison Officer for the Student Osteopathic Medical Association**, Des Moines University Chapter, 2006-2007: coordinated DO Day on the Hill, helped organize various club events, and corresponded directly with National Headquarters on the activities of the club
- **House of Mercy Committee**, December 2006: organized holiday party for homeless women and children
- **National Osteopathic Month Chairperson**, August 2006: organized week of events to celebrate osteopathy
- **Chairperson of SOMA Research Committee**, 2005-2006: organized events to promote and encourage research in the medical field
- **Histology Nexus Committee**, 2005: liaison between professor and students to further improve Des Moines University's academic coursework

PROFESSIONAL DEVELOPMENT

- Ad Hoc Manuscript Peer Reviewer for the International Journal of Radiology and Imaging Technology: 2019
- Ad Hoc Manuscript Peer Reviewer for the Journal of Surgery and Surgical Research: 2018
- Ad Hoc Manuscript Peer Reviewer for the Journal of Clinical Case Reports and Case Studies: 2018
- Ad Hoc Manuscript Peer Reviewer for the journal Gastroenterology and Liver Diseases: 2018.
- Ad Hoc Manuscript Peer Reviewer for the International Journal of Clinical Endocrinology and Metabolism: 2018.
- Medical Student Mentor. Provide mentoring services for 3rd year medical students involved

with their surgical rotations. 2017 - present

- Coordinator McCollister Rural Surgery Summer Research Program 2017. Rural surgical project for medical student between 1st and 2nd years interested in surgery.
- “Harnessing Your Inner GPS: Navigating your Career and Boss with Purpose.” University of Nebraska Medical Center. October, 2016.
- Lead Trauma Fellow developing a FCCS program for SICU residents at the University of Arizona: 2015 – 2016
- Crystalloid vs Colloid for IVF Resuscitation – Surgical Grand Rounds: 2015
- Lead SICU Fellow for closing the Surgical Critical Care Unit at Henry Ford Hospital: 2012 – 2013
- Manuscript Peer Reviewer for the New England Journal of Medicine: 2013
- CMS Sepsis Collaborative for creating tool to monitor Sepsis Bundle implementation nationally: 2012 – 2013
- NSQIP Semiannual Report – Surgery Grand Rounds 2013
- Resident education surgical critical care lecture series- Complications in the ICU, Consent, Sign out, Procedures, Liver failure, ARDS, APRV, Atrial Fibrillation, Documentation: 2012 – 2013
- SICU nursing education- Pain Agitation and Delirium in the ICU, APRV Ventilation: 2012 – 2013
- Carcinoid tumors and Carcinoid Syndrome Lecture - Journal Club SICU CME 2012
- Activated Protein-C Lecture - Journal Club SICU CME 2012
- PEA Arrest Lecture - Journal Club SICU CME 2012
- Gun Shot Wounds to the Duodenum – Trauma Grand Rounds 2012
- Critical Care Board Certification Exam Question Writer: 2011 – 2014

HONORS and AWARDS

- Fellow in the American College of Surgeons – Induction 2018
- Fellow in the American College of Osteopathic Surgeons – Induction 2017
- 2016 ACOS Resident Achievement Award
- Robert C. Erwin Literary Award ACOS: *Repeat Head CT? Not Necessary for Patients with a Negative Initial Head CT on Anticoagulation or Antiplatelet Therapy Suffering Low-Altitude Falls* – 2nd Prize, 2016.
- Robert C. Erwin Literary Award ACOS: *Improving Mortality in Trauma Laparotomy through the Evolution of Damage Control Resuscitation: Analysis of 1,030 Consecutive Trauma Laparotomies* – 3rd Prize, 2016.
- Robert C. Erwin Literary Award ACOS: *Hemodynamic changes in patients undergoing Carotid Endarterectomy under Cervical Block and General Anesthesia* – 1st Prize, 2014.
- Robert C. Erwin Literary Award ACOS: *Application of the Berlin Definition for ARDS in the Surgical Population* – 2nd Prize, 2014.
- Robert C. Erwin Literary Award ACOS: *Racial differences in vasopressor requirements for septic shock* – 3rd Prize, 2014.
- Robert C. Erwin Literary Award ACOS: *Lung injury prediction score is useful in predicting acute respiratory distress syndrome and mortality in surgical critical care patients* – 5th Prize, 2014.
- Henry Ford Macomb Hospital Original Research Project Award Winner – 1st Prize, 2014
- Henry Ford Hospital Fellow Original Research Project Award Winner – 1st Prize, 2012
- Henry Ford Macomb Hospitals Intern of the Year Finalist, 2010
- Sigma Sigma Pi Osteopathic Honor Society, 2006-present
- Des Moines University Academic Scholarship, 2006-2007
- University of Nebraska’s Senior Honorary (The Innocent’s Society), 2004
- Omicron Delta Kappa Honor Society, 2001-present
- National Youth Leadership Association of Medicine, 2001-present
- Golden Key National Honor Society, 2000-present

GRANTS

- Pigtail Catheter Randomized Multicenter Trial - 2019
Sponsored by University of Arizona
Principal Investigator
\$10,000 Total funding

VOLUNTEER

- Humanitarian Hernia Initiative – Provide pro bono hernia repairs to patients in need who are below the national poverty line and cannot afford it/have no insurance, 2017 – 2019.
- Surgical Mission Trip to Hospital Socorro de lo Alto in Sula, Honduras – Provide free surgical services to patients in need Sula, Honduras, 2015.
- Habitat for Humanity Participant – Help build homes for those in need of a place to live, 2010-present
- Participant in D.O. Day on the Hill, Washington, D. C., SOMA/AOA - rallied at the capitol about Tort Reform, 2005-2007
- Student Volunteer at La Clinica de Esperanza – provided post-partum and continuing pregnancy exams to Hispanic women, 2008.
- Community/School Sports Physicals—provided EKGs and sports physicals to local school children, 2006
- SOMA: “What’s in a Doctor’s Bag?”—speaking with elementary children about the instruments in a doctor’s bag, 2005-2007
- Community Osteopathic Manipulation Night—provided full body treatments for people in the community, 2005-2007
- House of Mercy—participated in holiday party for women and children, December 2005 and 2006
- Des Moines University Student Interviewer—interviewed prospective medical school candidates, 2005-2007
- Peer tutor—provided academic tutoring for Des Moines University students, 2006-2007
- Senior Health Fair—provided blood glucose screening and education for community members, 2005-2006
- Governor’s Annual Conference on Aging – provided blood glucose screening and blood pressure reading for community members, May 2006
- Des Moines University ACOFP Big Sib/Little Sib program—provided guidance to incoming medical students, 2006-2007
- Des Moines University Admissions Interview Ambassador—answered questions of interview candidates, 2005-2007
- Des Moines University Admissions Tour Guide—gave tours of school to interview candidates, 2005-2007
- Osteopathic Finish Line (OFL) treatment provider – provided treatments to runners at various races around the Des Moines area, 2005-2007.
- Iowa Marrow Donor Program – organized blood drive on campus for both students and members of the community, 2005-2007
- Children’s Miracle Network volunteer – Helped organize and participated in various Dance Marathon’s to help raise money for the CMN, 2004-2005
- American Diabetes Association Volunteer – organized Diabetes Walks and other events to help raise funds, 2003-present

EXPERIENCE

- ASSEST Course Participant – 2016.
- Surgical Anatomy Course: Thorax and Abdomen Completion at Wayne State University – College of Medicine, 2011.
- Gastrointestinal Endoscopy and Laparoscopy: An Introduction for Surgeons, Sponsored by SAGES, 2011.
- Fundamentals of Critical Care Support, 2009
- Detroit Trauma Symposium, 2009 - 2013

- Basic Surgery Skills/Aseptic Technique Course Completion (in accordance with national standards), 5/22/2007
- Teaching Assistant, Osteopathic Manipulative Medicine, 2006-2007
- Teaching Assistant, Physical Diagnosis, 2006-2007
- Teaching Assistant, Anatomy, 2006
- Teaching Assistant, Problem Based Learning Biochemistry, 2006
- Hospital Volunteer, Burn Unit, 2004-2005: helped with patient care and patient admissions/orders

MEDICAL ORGANIZATION AFFILIATIONS

- American College of Surgeons Member – 2018 - present
- Chest Wall Injury Society Member: 2017 – present
- Eastern Association of the Surgery of Trauma Member: 2017 – present
- Society of Critical Care Medicine: 2012 – present
- Detroit Surgical Association: 2013 - 2015
- American College of Osteopathic Surgeons: 2009 – present
- American Osteopathic Association: 2009 – present

MEDICAL SCHOOL ELECTIVE CLASSES

- Des Moines University Chronic Care Program—learned about chronic disease processes by spending time with an assigned patient, 2005-2007
- Cranial Nerves, 2006
- Problem-Based Learning Anatomy, 2006
- Problem-Based Learning Biochemistry, 2005

PAST EMPLOYMENT

- **Research Assistant** (University of Nebraska, Lincoln, NE) – I worked for a Professor of Biochemistry, Dr. Ruma Banerjee, for 4 years. My projects consisted of working with the enzymes Cystathionine Beta Synthase and Methionine Synthase and the various roles they play in human metabolism. Furthermore, I also studied how the human body processes the dangerous by-product homocysteine. I performed techniques such as Western and Northern blots, PCR, HPLC, crystallography, and culture growth. (40 hrs. per week) 2001-2005
- **Teaching assistant for undergraduate biology** (University of Nebraska, Lincoln, NE) – I held various sessions outside of the actual lectures where students could attend and get additional questions answered by me. I also helped students prepared for exams by providing study tips and study guides. (10 hrs. per week) 2003 - 2004
- **New Student Enrollment Orientation Leader** (University of Nebraska, Lincoln, NE) – I assisted incoming freshmen in registering for their classes. I also helped to ease their anxiety by providing tours of the campus, answering the questions of both students and parents, and performing skits about campus life. (20 hrs. per week) 2002
- **Golf Course Ground's Crew** (Green Valley Golf Course, Sioux City, IA) – I worked at a golf course as a member of the ground's crew helping to maintain the golf course's landscaping. My jobs included mowing, picking up trash, changing hole location, and performing any other tasks to maintain the landscaping of the course. (40 hrs. per week) Summer of 2000