

**Personal Data:**

Keely L. Buesing, MD, FACS

Associate Professor, Department of General Surgery  
Director of Emergency General Surgery  
Co-Director, Virtual OR Skills Lab Curriculum  
Section of Trauma | Surgical Critical Care | Emergency General Surgery

University of Nebraska Medical Center  
983280 Nebraska Medical Center  
Omaha, Nebraska 68198-3280

Email: [keely.buesing@unmc.edu](mailto:keely.buesing@unmc.edu)

**Education:**

Undergraduate	University of Nebraska-Lincoln Lincoln, NE Degree: BA 1/1996 – 5/2001
Medical School	University of Texas Health Science Center – San Antonio San Antonio, TX Degree: MD 7/1/2001 – 6/30/2005
Residency	University of Nebraska Medical Center Department of General Surgery Omaha, NE 7/1/2005 – 6/30/2012
Research Fellowship	Children's Hospital of Wisconsin Department of Pediatric Surgery Milwaukee, WI 7/1/2008 – 6/30/2010
Clinical Fellowship	Washington University/Barnes-Jewish Hospital Department of Surgical Critical Care St. Louis, MO 7/1/2012 – 6/30/2013

**Board Certifications and Licensing**

Board Certified, General Surgery	Certificate No. 59015	Exp. 12/31/2024
Board Certified, Surgical Critical Care	Certificate No. 3339	Exp. 12/31/2024
State of Nebraska	License No. 27342	Exp. 07/31/2020
National Provider Identifier	No. 1710191978	

**Memberships:**

American College of Surgeons. 2005-current.  
Society of Critical Care Medicine. 2012-current.  
Eastern Association for the Surgery of Trauma. 2013-current.  
Association for Academic Surgery. 2014-current.  
American Medical Association. 2005-current.  
Shock Society. 2014-current.

Association of Women Surgeons. 2015-current.  
 American Bar Association, Associate Member, No. 04511536. 2019-current.

### **Positions:**

11/2013-current	Reviewer for American Journal of Surgery.
12/2013-current	Performance Improvement Committee, Emergency General Surgery. TNMC, Omaha, NE.
01/2014-12/2016	Shift Physician, Advisory Board of Experts, Omaha EMS. Omaha, NE.
10/2014	Promotion & Tenure Committee, Department of General Surgery TNMC, Omaha, NE
01/2015-09/2017	Member, Surgical Services Operations Committee, UNMC <i>Committee was disbanded by institution.</i>
03/2015	Department of Surgery, Summer Research Student Selection Committee. UNMC, Omaha, NE.
07/2015	Invited peer reviewer for Clinical Medicine Insights: Therapeutics
08/2015-current	Member, Program Evaluation Committee, UNMC (General Surgery)
08/2015-current	Appointment to Core Faculty, Department of General Surgery, UNMC.
08/2015-current	Appointment to Graduate Faculty, University of Nebraska.
08/2015-current	Faculty Member, Integrative Physiology & Molecular Medicine (IPMM) Doctoral Program, UNMC.
08/2015-current	Faculty Member, Interdisciplinary Graduate Program in Biomedical Sciences, UNMC.
10/2015-current	Grants & Fellowship Committee, Association of Women Surgeons.
10/2015	Appointment to Fellow, American College of Surgeons.
10/2015	Invited reviewer, Journal of Pregnancy & Child Health
12/2015-01/2016	Member, Academic Variable Compensation Plan Committee.
06/2016-2/2020	Co-Director of Virtual OR Skills Lab Curriculum, UNMC.
12/2016	Appointment, Director of Emergency General Surgery.
12/2016	Scientist Reviewer, Defense Health Program-Operational Systems Development (DHP-OSD) peer review panel of the FY16 Defense Health Agency, Research, Development, and Acquisition (DHA RDA) Directorate for the Department of Defense (DoD).
9/2018	Consultant and member of Scientific Advisory Board, Respirogen, Inc.
10/2019	Courtesy Faculty Appointment, Department of Cellular and Integrative Physiology, UNMC.
11/2019	Scientist Reviewer, 2019 Combat Readiness-Medical Research Program, Wound Care-1 (WC-1) panel, P2RMIS.
11/2019	Scientist Reviewer, FY21 Combat Casualty Care Research Program (CCCRP) Intramural Peer Review Panel, P2RMIS.

### **Bibliography:**

- K Buesing, D Perry, C Reyes, S Abdessalam. *Castleman disease: surgical cure in pediatric patients*. J Pediatr Surg, 2009; 44(1): e5-8.
- K Buesing, J Densmore, S Kaul, K Pritchard Jr., J Jarzembowski, D Gourlay, K Oldham. *Endothelial microparticles induce inflammation in acute lung injury*. J Surg Res, 2011 Mar; 166(1): 32-39.
- K Buesing, E Tracy, C Kiernan, A Pastor, L Cassidy, JP Scott, R Ware, A Davidoff, F Rescorla, JC Langer, H Rice, K Oldham. *Partial Splenectomy in Hereditary Spherocytosis: A Multi-Institutional Review*. J Pediatr Surg, 2011 Jan; 46(1): 178-83.
- B Mullapudi, KA Flowers, KL Buesing. *Deep Venous Thrombosis and Venous Thromboembolism Prophylaxis*. Surg Clin North Am, 2015 Apr; 95(2):285-300.
- Damme C, Luo J, Buesing KL. *Isolated Prehospital Hypotension Correlates with Injury Severity and Outcomes in Trauma Patients*. Trauma Surgery & Acute Care Open, 12 Aug 2016. DOI: 10.1136/tsaco-2016-000013.
- Legband ND, Buesing K, Borden M, Terry B. *Treatment of Acute Respiratory Distress Syndrome in Rats with a Peritoneal Dosing System*. Journal of Medical Devices, 9(2), pp. 020929.1-020929.2. 2015. DOI: 10.1115/1.4030140.
- Legband ND, Hatoum LH, Thomas AN, Kreikemeier-Bower C, Hostetler D, Buesing KL, Borden MA, Terry BS. *Peritoneal Membrane Oxygenation Therapy for Rats with Acute Respiratory Distress Syndrome*. Journal of Medical Devices, Transactions of the ASME, 10(2), art. No. 020908. 2016. DOI: 10.1115/1.4033201.
- Hatoum, L., Legband, N., Thomas, A., Kreikemeier-Bower, C., Hostetler, D., Borden, M., Buesing, K., Terry, B. *Design and development of a rat peritoneal infusion device for oxygen microbubble bolus delivery*. Journal of Medical Devices, 10(2), pp. 020908.1-02.0908.3. 2016. DOI: 10.1115/1.4033203.
- Visenio M, Buesing K, Moffatt K. *Solid Organ Laceration in an Adolescent Soccer Player: A Case Report*. Medicine & Science in Sports & Exercise. Med Sci Sports Exerc. 2017 May 9. DOI: 10.1249/MSS.0000000000001316.
- Aghabaglou F, Buesing K, Legband ND, Slagle C, Xie W, Borden M, Kreikemeier-Bower C, Terry BS. *Preliminary Investigation of the Mechanics of a Novel Thoracic Cavity Extra Pulmonary Oxygenation Device*. Proceedings of the 2018 Design of Medical Devices Conference, DMD 2018-6908. 2018 Apr.
- Tecos ME, Buesing KL. *Updates on Prophylaxis for Deep Venous Thrombosis and Venous Thromboembolism*. Medical Research Archives. May 2019; 7(5): 1-18.
- Fiala A, Slagle C, Legband N, Aghabaglou F, Buesing K, Borden M, Terry B. *Treatment of a rat model of LPS-induced ARDS via peritoneal perfusion of oxygen microbubbles*. Journal of Surgical Research, (246), pp. 450-456.

### **Oral Presentations:**

- Condon-Donagan research presentation, June, 2009; Milwaukee, WI  
*Endothelial Microparticles in Acute Lung Injury*. K Buesing, S Kaul, L Cassidy, D Weihrauch, J Densmore, K Pritchard Jr., D Gourlay, K Oldham.
- American College of Surgeons Surgical Forum, October, 2009; Chicago, IL  
*Endothelial microparticles attenuate stimulated nitric oxide production in pulmonary artery endothelial cells*. K Buesing, S Kaul, D Jones, K Pritchard Jr., D Gourlay, J Densmore, K Oldham.
- Academic Surgical Congress, February, 2010: San Antonio, TX  
*Endothelial Microparticles Induce Inflammation in Acute Lung Injury*. K Buesing, J Densmore, S Kaul, K Pritchard Jr., J Jarzembowski, D Gourlay, K Oldham.
- American Pediatric Surgical Association, May, 2010: Orlando, FL.  
*Partial Splenectomy in Hereditary Spherocytosis: A Multi-Institutional Review*. K Buesing, E Tracy, C Kiernan, A Pastor, L Cassidy, JP Scott, R Ware, A Davidoff, F Rescorla, JC Langer, H Rice, K Oldham.

American College of Surgeons Scientific Papers Session, October, 2010; Washington, DC.

*Novel Tripeptide Mitigates Pulmonary Sequestration of Endothelial Microparticles.* K Buesing, J Rydlewicz, J Densmore, H Zhang, Y Shi, KA Pritchard Jr., D Gourlay, K Oldham.

General Surgery Grand Rounds, June 2012: UNMC, Omaha, NE  
Endothelial Microparticles in Acute Lung Injury.

Makin' It Real: Medical Student Lecture Series. October, 2013. UNMC, Omaha, NE.  
Bacteriology Case Studies.

Kansas City Committee of Trauma Resident Paper Competition. December, 2013. Kansas City, KS.  
In an urban setting, does field hypotension matter if the patient arrives with a normal blood pressure?

General Surgery Grand Rounds, January 2014: UNMC, Omaha, NE  
Updates in Management of Adult Respiratory Distress Syndrome.

NASA Aeronautics and Space Science, April 17, 2015. Lincoln, NE.  
Surgical Options in Space: Development of a Closed-Loop Peritoneal Membrane Oxygenator for Acute Respiratory Distress Syndrome.

Rural Emergency Medicine Course, Omaha, NE. April 22, 2015.  
Rural Trauma through the Eyes of a Trauma Surgeon.

Military Health System Research Symposium, Ft. Lauderdale, FL. August 19, 2015.  
Development of a Novel Method of Peritoneal Oxygenation for Salvage During Acute Respiratory Failure.

Trauma Symposium, Nebraska Medicine, Omaha, NE. October 23, 2015.  
Risks of Ignoring Hypotension.

ACS Committee on Trauma Meeting, San Diego, CA. April 10, 2016.  
Peritoneal Membrane Oxygenation for Acute Respiratory Distress Syndrome.

Rural Emergency Medicine Course, Omaha, NE. April, 2016.  
Developments in Rural Trauma Care.

General Surgery Department Grand Rounds, 12/13/2017. Omaha, NE  
Alternative Oxygen Carriers for Treatment of Severe ARDS.

University of Nebraska Board of Regents, 8/3/2018. Brief overview of oxygen microbubble research for Board of Regents.

UNMC, 10/31/2018. Overview of oxygen microbubble research for Navy RDML Darin Via, Dpty Chief of Readiness, Bureau of Medicine & Surgery, and accompanying personnel.

UNMC, 11/28/2018. Surgery Research Forum. Alternative Oxygen Carriers for Treatment of Severe ARDS.

Eastern Association for the Surgery of Trauma (EAST) Annual Scientific Assembly, 01/17/2019, Austin, TX. Assembly Quick Shot Presentation. "Oxygen Microbubbles Correct Acute Hypoxia in Rat Model of Smoke Inhalation Injury".

Presentation of Oxygen Microbubble Project during Nebraska Congressional Staff Visit to UNMC, 10/4/2019, Omaha, NE.

American College of Surgeons Committee on Trauma, Region VII, 12/4/2019, Kansas City, MO. Resident Paper Competition (Gautam Malhotra, MD, PhD presenting). "Alternative Oxygen Carriers for Treatment of Acute Respiratory Distress Syndrome". [Winner, Basic Science Competition]

Presentation of Oxygen Microbubble Project during Air Force Surgeon General's Visit to UNMC and NSRI, 12/11/2019, Omaha, NE.

**Posters:**

Shock Society, June, 2009; San Antonio, TX

Preferential Pulmonary Sequestration of Endothelial Microparticles. K Buesing, S Kaul, L Cassidy, K Pritchard Jr., D Gourlay, K Oldham.

Medical College of Wisconsin Research Day, September, 2009; Milwaukee, WI.

Preferential Pulmonary Sequestration of Endothelial Microparticles. K Buesing, S Kaul, L Cassidy, K Pritchard Jr., D Gourlay, K Oldham.

*Finalist for Merit Award in postgraduate research.*

Wisconsin Surgical Society, November, 2009; Kohler, WI

Endothelial Microparticles in Acute Lung Injury. K Buesing, S Kaul, L Cassidy, K Pritchard Jr., D Gourlay, K Oldham.

Society of Critical Care Medicine, January, 2015; Phoenix, AZ.

Prehospital Hypotension Correlates with Injury Severity and Outcomes. C Damme, J Luo, MR Goede, S Cemaj, JC Stothert, Jr., PJ Schenarts, K Buesing.

*Finalist for Abstract Award.*

NASA Human Research Program Investigators' Workshop. January 13-15, 2015. Galveston, TX.

Surgical Options in Space: Development of a Closed-Loop Peritoneal Membrane Oxygenator for Acute Respiratory Distress Syndrome. ND Legband, KL Buesing, MA Borden, BS Terry.

Design of Medical Devices Conference. April 13-16, 2015. University of Minnesota, Rochester, MN.

The Treatment of Acute Respiratory Distress Syndrome in Rats with a Peritoneal Dosing System. ND Legband, D Hostetler, KL Buesing, MA Borden, BS Terry.

38<sup>th</sup> Annual Conference on Shock. Shock Society. June 8, 2015. Denver, CO.

Alternative to ECMO: Development of a Novel Peritoneal Membrane Oxygen Delivery System. KL Buesing, ND Legband, DE Hostetler, MR Goede, MA Borden, BS Terry.

13<sup>th</sup> Annual AMA Research Symposium. AMA-MSS. November 13, 2015. Atlanta, GA.

Clinical Outcomes and Health Care Improvement Feasibility of an Enhanced Recovery Protocol in an Emergency General Surgery Setting. MR Visenio, J Luo, KL Buesing.

Legband, N.<sup>3</sup>, Hatoum, L.<sup>2</sup>, Kreikemeier-Bower, C., Hostetler, D., Buesing, K., Borden, M., Terry, B., Peritoneal Membrane Oxygenation Therapy for Rats with Acute Respiratory Distress Syndrome, Design of Medical Devices 2016, Minneapolis, MN, April, 2016.

Hatoum, L.<sup>2</sup>, Legband, N.<sup>3</sup>, Thomas, A., Kreikemeier-Bower, C., Hostetler, D., Borden, M., Buesing, K., Terry, B.

Design and Development of a Rat Peritoneal Infusion Device for Oxygen Microbubble Bolus Delivery, Design of Medical Devices 2016, Minneapolis, MN, April, 2016.

Terry, B., Borden, M., Velds, H., Slagle, C., Krause, C., Legband, N., Bills, N., Morien, M., Buesing, K. Development and validation of deployable peritoneal microbubble oxygenation for mitigation of acute respiratory distress syndrome, AFMS Technology Demonstration Day, Washington DC, May 9, 2017.

Terry, B., Borden, M., Velds, H., Slagle, C., Krause, C., Legband, N., Bills, N., Morien, M., Buesing, K. Development and validation of deployable peritoneal microbubble oxygenation for mitigation of acute respiratory distress syndrome, COMEDS/NATO meeting, Washington DC, May 30, 2017.

Velds, H., Slagle, C., Borden, M., Aghabaglou, F., Buesing, K., Morien, M., Terry, B.

Oxygen microbubble treatment of acute hypoxia: development of animal injury models and scale-up of microbubble production, Military Health System Research Symposium (MHSRS), Kissimmee, FL, August 2017.

Krause C, Bills N, Weber H, Slagle C, Terry B, Borden M, Buesing K.

Oxygen microbubbles correct acute hypoxia in a rat model of smoke inhalation injury. Military Health System Research Symposium (MHSRS), Kissimmee, FL, August 2018.

**Abstracts:**

Shock Society 2009, San Antonio, TX

Preferential Pulmonary Sequestration of Endothelial Microparticles. K Buesing, S Kaul, L Cassidy, K Pritchard Jr., D Gourlay, K Oldham.

American College of Surgeons Surgical Forum 2009, Chicago, IL

Endothelial Microparticles Attenuate Stimulated Nitric Oxide Production in Pulmonary Artery Endothelial Cells. K Buesing, S Kaul, D Jones, K Pritchard Jr., D Gourlay, J Densmore, K Oldham.

Wisconsin Surgical Society 2009, Kohler, WI

Endothelial Microparticles in Acute Lung Injury. K Buesing, S Kaul, L Cassidy, K Pritchard Jr., D Gourlay, K Oldham.

Academic Surgical Congress 2010, San Antonio, TX

Endothelial Microparticles Induce Inflammation in Acute Lung Injury. K Buesing, J Densmore, S Kaul, K Pritchard Jr., J Jarzembowski, D Gourlay, K Oldham.

American Pediatric Surgical Association 2010, Orlando, FL

Partial Splenectomy in Hereditary Spherocytosis: A Multi-Institutional Review. K Buesing, E Tracy, C Kiernan, A Pastor, L Cassidy, JP Scott, R Ware, A Davidoff, F Rescorla, JC Langer, H Rice, K Oldham.

Society of Critical Care Medicine. January, 2015.

Prehospital Hypotension Correlates with Injury Severity and Outcomes. C. Damme, J. Luo, K. Buesing.

Kansas City Region 7 COT.

The Influence of Poverty Level on Trauma Patients from Urban and Rural Environments using a Statewide Trauma Registry. JR Thompson, R Cooper, M Goede, L Schlitzkus, K Buesing, C Evans, J Stothert, PJ Schenarts.

Design of Medical Devices Conference.

The Treatment of Acute Respiratory Distress Syndrome in Rats with Peritoneal Membrane Oxygenation. N Legband, K Buesing, M Borden, B Terry.

NASA Human Research Program Investigators' Workshop.

Surgical Options in Space: Development of a Closed-Loop Peritoneal Membrane Oxygenator for Acute Respiratory Distress. ND Legband, KL Buesing, MA Borden, BS Terry.

Midwest Student Biomedical Research Forum. February 28, 2015. Omaha, NE.

Prehospital Hypotension Correlates with Injury Severity and Outcomes. C Damme, J Luo, K Buesing.

Shock Society. June, 2015. Denver, CO.

Alternative to ECMO: Development of a Novel Peritoneal Membrane Oxygen Delivery System. KL Buesing, ND Legband, MR Goede, MA Borden, BS Terry.

Military Health System Research Symposium. 2015.

Development of a Novel Method of Peritoneal Oxygenation for Salvage During Acute Respiratory Failure. KL Buesing, ND Legband, MA Borden, DE Hostetler, BS Terry.

Design of Medical Devices Conference, University of Minnesota, April 11-14, 2016.

Design and Development of a Rat Peritoneal Infusion Device for Oxygen Microbubble Bolus Delivery. L Hatoum, N Legband, A Thomas, C Kreikemeier-Bower, D Hostetler, M Borden, K Buesing, B Terry.

Design of Medical Devices Conference, University of Minnesota, April 11-14, 2016.

Peritoneal Membrane Oxygenation Therapy for Rats with Acute Respiratory Distress Syndrome. N Legband, L Hatoum, A Thomas, C Kreikemeier-Bower, D Hostetler, K Buesing, M Borden, B Terry.

**Book Chapters:**

- 6/2015 Omaha Fire Department Paramedic Treatment Protocol book.
- 12/2019 Acute Kidney Injury in the ICU. Cameron and Cameron: Current Surgical Therapy, 13<sup>th</sup> Ed.

**Awards/Grants:**

- 12/2013 Faculty Diversity Award.  
Awarded \$50,000/year x 2 years. (0.1 FTE)  
**PI: Keely Buesing, MD**
- 7/2014 Nomination to Physician Leadership Academy, TNMC.
- 11/2014 Biomedical Research Seed Grants. *Peritoneal Microbubble Oxygen Therapy for ARDS*.  
Awarded \$50,000 x 1 year. (0% FTE – faculty salary not supported by project)  
PI: Benjamin Terry, PhD  
**Co-I: Keely Buesing, MD; Matt Goede, MD**
- 4/2015 Nebraska Research Initiative. *Novel Treatment for Acute Respiratory Distress Syndrome using Transperitoneal Oxygenated Microbubbles*.  
Awarded \$100,000 over FY 2015-2017 period. (0% FTE – faculty salary not supported by project)  
**PI: Keely Buesing, MD**  
Co-I: Benjamin Terry, PhD; Matthew Goede, MD
- 07/2015 NIH R21. *Oxygen Microbubble Peritoneal Ventilation Treatment for Acute Respiratory Distress Syndrome*.  
Awarded (\$228,258 over 2 years), Grant #1R21HL129144-01 (0.05 FTE)  
PI: Benjamin Terry, PhD  
**Co-I: Keely Buesing, MD**
- 10/2015 Awarded Madonna Chairman's 2015 GOAL Award.
- 09/2016 NU/NSRI UARC Contract No. FA4600-12-D-9000, TOPR No. 0054. Supporting Agency: US AFSG through NU/NSRI.  
Title: En-Route Care Patient Viability Technology Development.  
Awarded \$999,899  
**PI: Keely Buesing, MD**  
Collaborating PIs: Benjamin Terry, PhD; Mark Borden, PhD
- 02/2017 Nominated for Student Senate Mentor Award, UNMC  
*One of 15 nominations from students across all colleges on UNMC campus for "mentors in their life who served as role models, held high ethical standards, and took personal interest in the development and growth of the students they worked with."*
- 11/2017 NU/NSRI UARC Contract No. FA4600-18-U913 (TOPR 0057). Supporting Agency: US AFSG through NU/NSRI.  
Title: Maturation of En-Route Care Acute Respiratory Distress Syndrome (ARDS) Mitigation Strategy  
Awarded: \$3.7 M  
**PI: Keely Buesing, MD**  
Collaborating PIs: Benjamin Terry, PhD; Mark Borden, PhD
- 2/2018 New Investigator Award, UNMC.
- 9/2018 NU/NSRI UARC Contract No. FA4600-18-F-U911 (TOPR 0013). Supporting Agency: Air Force Medical Support Agency (AFMSA) through NU/NSRI.  
Title: Fielding Proof of Concept: En Route Care Acute Respiratory Distress Syndrome (ARDS) Mitigation Using Oxygenated Microbubbles (OMB).  
Awarded: \$3.8M  
**PI: Keely Buesing, MD**  
Co-PIs: Benjamin Terry, PhD; Mark Borden, PhD; Bob Scribner

2/2020 NIH Application No. 1 R01 HL151151-01.  
 Title: Peritoneal Oxygen Delivery For The Treatment Of Acute Respiratory Distress Syndrome  
 Awarded: \$3,315,272  
 PI: Mark Borden, PhD  
**Collaborating PIs: Keely Buesing, MD; Benjamin Terry, PhD**

Submitted

NIH FY20 SBIR. Funding opportunity No. PA-19-272.  
 Title: Rectal Delivery of Oxygen Microbubbles to Treat Smoke Inhalation Injury  
 Proposed Budget: \$82,313.  
 PI: Paul Mountford, PhD  
 Co-Investigators: **Keely Buesing, MD**; Mark Borden, PhD

**Teaching/Mentorships:**

4/2014.	Mechanical Ventilation eCurriculum lectures.
1/2014 to 8/2014.	Department of Surgery Summer Student Research Program of Excellence, UNMC, Omaha, NE. <i>Research mentor for first-year medical student, Clayton Damme. Resulted in poster presentation at SCCM in Phoenix, AZ – poster was selected as finalist in abstract award competition.</i>
2/19/14.	Resident Seminar & Case Conference, UNMC. Neck & Thoracic Trauma.
5/2014 & recurrent	Instructor, ATLS. Omaha, NE.
7/2014 & recurrent	Recurring lecturer at medical student Friday lecture series, UNMC. Topic: Surgical Bleeding.
10/2014	Faculty speaker, General Surgery Review Course American College of Surgeons, San Francisco, CA. Lectures: Perioperative Care - Renal Function, Cardiac Critical Care.
3/18/2014	Resident Seminar & Case Conference, UNMC. Chest Trauma.
Summer, 2015.	Department of Surgery Summer Student Research Program of Excellence, UNMC, Omaha, NE. Research mentor for first-year medical student, Michael Visenio.
June, 2015	Department of Surgery Intern Boot Camp Teaching over two days included practical skills in central line placement, chest tube placement, thoracentesis, paracentesis, intubation, cricothyroidotomy, and tracheostomy.
10/2015	Faculty speaker, General Surgery Review Course. American College of Surgeons, Chicago, IL. Lectures: Renal Function, Cardiac Critical Care.
Spring, 2016	Masters Committee for Liana Hatoum, BS Reviewed and assisted in the defense of Masters Candidate thesis on diffusion kinetics of oxygenated microbubbles across the peritoneum.
Summer, 2016	PhD Committee for Nathan Legband, PhD Candidate, University of Nebraska-Lincoln.
10/2016	Faculty speaker, General Surgery Review Course. American College of Surgeons, Washington, DC. Lectures: Cardiac Critical Care, Pain Management.
11/2016	Chest tube skills lab. Emergency Department Cadaver Lab. Omaha, NE. UNMC.



- 12/2016 Masters Committee for Fariba Aghabaglou, University of Nebraska-Lincoln.
- April, 2017 Chest Tube Skills Lab. Rural Emergency Medicine Course, UNMC, Omaha, NE.
- April, 2017 Patient Handoff Lecture, 4<sup>th</sup> Year Medical Student Surgical Bootcamp. Dept of General Surgery, UNMC, Omaha, NE.
- Summer, 2017 Department of Surgery Summer Student Research Program of Excellence, UNMC, Omaha, NE. Research mentor for first-year medical student, Sarah Schmoker.
- 10/2017 Faculty speaker, General Surgery Review Course. American College of Surgeons. Lectures: Cardiac Critical Care, Pain Management.
- 5/9/2018 Moderator for General Surgery Resident Lecture & Case Presentation – TEG, Coagulopathy
- 10/2019 Master's Thesis Committee, Nathaniel Zollinger, University of Nebraska-Lincoln.
- 12/2019 PhD Committee, Fariba Aghabaglou, University of Nebraska-Lincoln.

### **Community Service**

- 2/27/2015 Hernia Repair for the Underserved. Bellevue, NE.  
Volunteered day of umbilical and inguinal hernia repairs pro bono at Bellevue Medical Center.
- 11/2018 Grace 4 Haiti. Pierre de Payen, Haiti.  
Week of various clinical and surgical duties for people of Haiti.
- 3/11/2020 Hernia Repair for the Underserved. Bellevue, NE.  
Volunteered day of umbilical and inguinal hernia repairs pro bono at Bellevue Medical Center.

### **Continuing Education**

- Jan, 2015 ECMO Management Course, Society of Critical Care Medicine. Phoenix, AZ.