

## CURRICULUM VITAE

**NAME:** BRIJESH S. "BILLY" GILL, M.D., F.A.C.S.

**PRESENT TITLE:** Associate Professor of Surgery

**OFFICE ADDRESS:** The University of Texas Medical School at Houston  
Department of Surgery  
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**DATE OF BIRTH:** April 3, 1972

**PLACE OF BIRTH:** Montgomery, Alabama

**CITIZENSHIP:** USA

**MARITAL STATUS:** Married - Michelle McNutt, M.D.

**UNDERGRADUATE EDUCATION:** 1989-1993 Harvard University  
Cambridge, MA - S.B. (Biomedical Engineering)

**GRADUATE EDUCATION:** 1993-1997 The University of Alabama School of Medicine  
Birmingham, AL - M.D.

### POST GRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

1997-2003 Residency – General Surgery  
The University of Texas Medical School  
Houston, TX

2003-2004 Critical Care Fellowship  
The University of Texas Medical School  
Houston, Texas

### ACADEMIC APPOINTMENTS:

2003-2004 Clinical Instructor  
Department of Surgery  
Division of Trauma/Critical Care  
The University of Texas Medical School at Houston  
Houston, Texas

## **ACADEMIC APPOINTMENTS (continued):**

- 2004-2011 Assistant Professor of Surgery  
Department of Surgery  
Division of Trauma/Critical Care  
The University of Texas Medical School at Houston  
Houston, Texas
- 2008-present Adjoint Assistant Professor  
Department of Biomedical Engineering,  
The University of Texas at Austin  
Austin, Texas
- 2011-present Associate Professor of Surgery  
Department of Surgery  
Division of Trauma/Critical Care  
The University of Texas Medical School at Houston  
Houston, Texas

## **HOSPITAL APPOINTMENTS:**

- 2004-present Active Staff and Surgeon  
Memorial Hermann Hospital  
Houston, Texas
- 2004-present Active Staff and Surgeon  
Lyndon Baines Johnson General Hospital  
Houston, Texas
- 2004- 2007 Director of Trauma  
Lyndon B. Johnson General Hospital  
Houston, Texas

**LICENSURE:** Texas License - K9284 (Active)

**CERTIFICATION:** Advanced Cardiac Life Support  
Advanced Trauma Life Support - Instructor  
Extracorporeal Life Support  
1995 USMLE Step 1  
1996 USMLE Step 2  
1998 USMLE Step 3  
2005 American Board of Surgery  
2007 Surgical Critical Care  
2014 American Board of Surgery - Recertification

## **PROFESSIONAL ORGANIZATIONS:**

- 1994-2000 American Medical Association  
2003-2005 Society of Critical Care Medicine  
2006-present Association for Academic Surgery  
2007-present American College of Surgeons  
2007-present American Society for Artificial Internal Organs  
2008-present University of Texas Center for Biomedical  
Engineering

**PROFESSIONAL ORGANIZATIONS (continued):**

2009-present Houston Surgical Society  
2009-present Southwestern Surgical Society  
2012-present Biomedical Engineering Society

**AWARDS, HONORS, AND MEMBERSHIPS IN HONORARY SOCIETIES:**

1992-1993 Teaching Fellow, Department of Physics, Harvard:  
Danforth Center Award for Excellence in  
Teaching  
(x4)  
1996 Tinsley Harrison Society, UASOM  
2001 Top Clinical Paper-American College of Surgeons,  
South, Texas Chapter  
2008 ASAIO Young Innovator Fellowship

**EDITORIAL POSTIONS:**

2008-present Military Medicine: Reviewer  
2010-present Journal of Biomedical Science and Engineering:  
Reviewer  
2010-present Tissue Engineering: Reviewer  
2010-present Journal of Biosensors & Bioelectronics: Editorial  
Board  
2011-present Journal of Biotechnology & Biomaterials: Editorial  
Board  
2007-2013 American Society for Artificial Internal Organs  
Journal: Editorial Board

**SERVICE ON UNIVERSITY OF TEXAS-HOUSTON MEDICAL SCHOOL  
AFFILIATED HOSPITAL COMMITTEES:**

2003-2007 Trauma Committee - Chairman  
Lyndon B. Johnson General Hospital  
2005-2007 Medical Executive Committee  
Harris County Hospital District  
2007-present Multidisciplinary Peer Review Committee  
Memorial Hermann Hospital

**SERVICE ON UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER  
COMMITTEES:**

2010-2012 Intellectual Property Committee

**MENTORSHIP OF POST-DOCTORAL FELLOWS**

**The University of Texas Medical School at Houston:**

2004-2006 Ravi Radhakrishnan, M.D.  
2006-2008 Matthew Harting, M.D.

**MENTORSHIP OF POST-DOCTORAL FELLOWS (continued):**

**The University of Texas Medical School at Houston:**

2008-2010	Shinil Shah, M.D.
2008-2010	Peter Walker, M.D.

**The University of Texas at Austin:**

2010-2011	Sang-soo Je, Ph.D.
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**MENTORSHIP OF GRADUATE STUDENTS:**

**The University of Texas Medical School at Houston:**

2014-2015	Nicholas Valilis, M.D.
2013-2014	Mitchell George, M.D.
2003-2005	Carter Smith, M.D.

**The University of Texas at Austin:**

2004	Nate Kemp, Ph.D. (BME)
2004-2005	Ozgur Ekici, M.S. (ME)
2004-2006	Kevin Aroom, M.S. (BME) (Thesis Committee)
2005-2007	Alex Bjelica, M.S. (ME) (Thesis Committee)
2005-2010	Albert Espinoza, M.S.(BME) (Thesis Committee)
2006-2009	Scott Collins, Ph.D. (BME) (Ph.D. Committee)
2008-2010	Dongwhan Kim (ME) (Thesis Committee)
2010-2012	Tushar Sharma (BME) (Ph.D. Committee)

**MENTORSHIP OF UNDERGRADUATE STUDENTS:**

**The University of Texas at Austin:**

2005	Sima Yazdani (BME)
2005	David Rainosek (BME)
2005	Kunal Shah (BME)
2006	Lindsey Fogle (BME)
2006	Lindsey Villarubbia (BME)
2006-2007	Chris King (BME)
2006-2007	Sheena Black (BME)
2006-2007	Santhisri Kodali (BME)
2006-2007	Kaiwun Lee (BME)

## MENTORSHIP OF UNDERGRADUATE STUDENTS (continued):

### The University of Texas at Austin:

2007	Mike Yin (BME)
2007	Huram Mok (BME)
2010	Stephen Williams (BME)

### John Hopkins University:

2008	Tanmay Ghokale (BME)
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### Case Western Reserve University:

2008	Gregory Minwell (BME)
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### Rice University:

2009	Sean Paschall (BME)
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### Universidad de Puerto Rico:

2009	Natalia Velez Ramos (BME)
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## CLINICAL DUTIES:

Staff Trauma Surgeon, Memorial Hermann Hospital  
Surgical Intensivist, Memorial Hermann Hospital

## CURRENT GRANT SUPPORT:

## PAST GRANT SUPPORT:

1. "Portable Fluid Warming System": \$98k, U.S. Army Telemedicine and Advanced Technology Research Center, W81XWH-04-1-0729, 2004—**Principal Investigator**
2. "Portable Fluid Warming System": \$20k, UT Center for Biomedical Engineering/Charles W. and Judy Spence Tate Foundation, 2005—**Principal Investigator**
3. "Active Thermal Resuscitation": \$600k, U.S. Army Telemedicine and Advanced Technology Research Center, 2005-2007—**Co- Investigator** (Principal Investigator: Charles S. Cox, Jr., M.D.)
4. "Proteomic Evaluation of Urine for Renal Failure in Trauma": \$30k direct costs/year, **Support Faculty** in NIGMS P50 GM038529-16 "Pathogenesis of Multiple Organ Failure," \$2.1m, Principal Investigators Frederick A. Moore, M.D. and David W. Mercer, M.D., 2004-2007.
5. "A System for Automated Field Tube Thoracostomy": \$20k, UT Center for Biomedical Engineering/Charles W. and Judy Spence Tate Foundation, 2006—**Principal Investigator**
6. "Active Thermal Resuscitation": \$872k, U.S. Army Telemedicine and Advanced Technology Research Center, W81XWH-07-1-0496, 2007-2009—**Principal Investigator**
7. "Portable Warming Systems": \$40k, U.S. Special Operations Command, H92236-10-P-3134, 2010—**Principal Investigator**
8. "Active Thermal Resuscitation": \$561k, U.S. Army Telemedicine and Advanced Technology Research Center, W81XWH-10-1-01060, 2010-2012—**Principal Investigator**

## PUBLICATIONS

### Peer Reviewed Publications:

1. **Gill BS**, Hardin WD: Computerized atlas of neonatal surgery. *Proceedings of the International Society for Optical Engineering*, 2435:24-27, 1995.
2. **Gill BS**, MacFadyen BV: Ultrasonic dissectors in minimally invasive surgery. *Seminars in Laparoscopic Surgery*, 6:229-234, 1999.
3. Neville HL, Seymour-Dempsey K, Slopis J, **Gill BS**, Moore BD, Lally KP, Andrassy RJ: The Role of Surgery in Children with Neurofibromatosis. *Journal of Pediatric Surgery*, 36(1):25-29, 2001.
4. Liu TH, Consorti ET, Kawashima A, Tamm EP, Kwong KL, **Gill BS**, Sellin JH, Peden EK, Mercer DW: Patient evaluation and management with selective use of magnetic resonance cholangiography and endoscopic retrograde cholangiopancreatography prior to laparoscopic cholecystectomy. *Annals of Surgery*, 234(1):33-40, 2001.
5. **Gill BS**, Neville HL, Khan AM, Cox CS, Lally KP: Delayed institution of extracorporeal membrane oxygenation is associated with increased mortality rate and prolonged hospital stay. *Journal of Pediatric Surgery*, 37(1):7-10, 2002.
6. Liu TH, Kwong KL, Tamm EP, **Gill BS**, Brown SD, Mercer DW: Acute pancreatitis in intensive care unit patients: value of clinical and radiologic prognosticators at predicting clinical course and outcome. *Critical Care Medicine*, 31(4):1026-30, 2003.
7. Radhakrishnan RS, Shah K, Xue H, Moore FA, Weisbrodt NW, Allen SJ, **Gill BS**, Cox CS, Jr. Measurement of Intestinal Edema using an Impedance Analyzer Circuit. *Journal of Surgical Research*, 138(1):106-10, 2007. *Epub* 2006 Dec 8.
8. Radhakrishnan RS, Shah K, Xue H, Moore FA, Weisbrodt NW, Allen SJ, **Gill BS**, Cox CS, Jr. Minimally Invasive Measurement of Intestinal Edema using an Impedance Analyzer Circuit. *Gastroenterology*, (4 Suppl 2):A1-911, 2006 Apr 13.
9. Cox CS, Radhakrishnan RS, Villarrubia L, Xue H, Uray K, **Gill BS**, Stewart R, Laine G. Hypertonic Saline Modulation of Intestinal Tissue Stress and Fluid Balance. *Shock*, 29(5):598-602, 2008. *Epub* 2008 Jan 9.
10. Fischer UM, **Gill BS**, Fogle L, Xue H, Cox CS. Portable Arterio-venous Rewarming for Hypothermia: Cardiovascular Considerations. *ASAIO Journal*, 54(3): 278-83, 2008.
11. Aroom KR, Cox CS, Radhakrishnan RS, Smith CT, **Gill BS**. Bioimpedance analysis: A guide to simple design and implementation. *Journal of Surgical Research*, 153(1):23-30, 2009. *Epub* May 7, 2008.
12. **Gill BS**, Cox CS. Thermodynamic and Logistical Considerations for Active Thermal Resuscitation in Hypothermia. *Military Medicine*, 173(8):743-748, 2008.
13. Harting MT, Smith CT, Radhakrishnan RS, Dash PK, **Gill BS**, Cox CS. Regional Differences in Cerebral Edema after Traumatic Brain Injury Identified by Impedance Analysis. *Journal of Surgical Research*, 159(1):557-564, 2010. *Epub* November 27, 2008.
14. Walker PA, Aroom KR, Jimenez F, Shah SK, Harting MT, **Gill BS**, Cox CS. Advances in Progenitor Cell Therapy Using Scaffolding Constructs for Central Nervous System Injury. *Stem Cell Reviews and Reports*, 5(3):283-300, 2009.
15. Jastrow KM, **Gill BS**, Dubinsky WP, Mayorga-Wark O, Gonzalez EA, Mercer DW. Urine Proteomic Profiling: A Tool for the Identification of Early renal Failure in Critically Injured Trauma Patients. *Journal of Surgical Research* 2009 January; 151(2):292-292.

## PUBLICATIONS

### Peer Reviewed Publications (continued):

16. Walker PA, Jimenez F, Gerber M, Aroom K, Shah SK, Harting MT, **Gill BS**, Savitz S, Cox CS Jr. Effect of needle diameter and flow rate on mesenchymal stromal cell characterization and viability. *Tissue Engineering*, 16(5):989-97, 2010. Epub January 30, 2010.
17. Shah SK, Fogle LN, Aroom KR, **Gill BS**, Moore-Olufemi SD, Jimenez F, Uray KS, Stewart RH, Laine GA, Cox CS Jr. Hydrostatic intestinal edema induced signaling pathways: potential role of mechanical forces. *Surgery*, 147(6):772-9, 2010. Epub January 25, 2010.
18. Shah SK, Cox CS Jr, Xue H, Aroom KR, Walker PA, **Gill BS**, Jimenez F, Moore-Olufemi SD. Non-occlusive mesenteric hypertension: Elucidating the pathophysiology of gastroschisis-related intestinal dysfunction. *Journal of Surgical Research* 2011; 165(2): 180.
19. Sang-Soo,Je, Sharma T, Lee Y, **Gill BS**, Zhang J. Fabrication and characterization of Air-Fluidic Thin-film PVDF-TrFE Pressure Sensors. Abstract published in 2011 IEEE 24th International Conference Micro Electro Mechanical Systems, pp.644-647.
20. Cotton BA, Reddy N, Hatch QM, LeFebvre E, Wade CE, Kozar RA, **Gill BS**, Albarado R, McNutt MK, Holcomb JB. Damage control resuscitation is associated with a reduction in resuscitation volumes and improvement in survival in 390 damage control laparotomy patients. *Annals of Surgery* 2011 Oct; 254(4):598-605.
21. Sharma T, Je S, **Gill BS**, Zhang J. Patterning piezoelectric thin film PVDF-TrFE based pressure sensor for catheter application. *Sensors & Actuators A: Physical* 2012; 177: pp 87-92.
22. Shah, SK, Cox, CS, Jr., Aroom, KR, Xue, H, Walker, PA., , **Gill, BS**, Jimenez, F, Moore-Olufemi, SD. Effects of Non-Occlusive mesenteric hypertension on Intestinal Function: Implications for Gastroschisis-Related Intestinal Dysfunction. *Pediatric Research* (2012) doi:10.1038/pr.2012.20
23. Holcomb JB, Minei KM, Scerbo ML, Radwan ZA, Wade CE, Kozar RA, **Gill BS**, Albarado R, McNutt MK, Khan, S, Adams, PR, McCarthy JJ, Cotton BA. Admission Rapid Thrombelastography Can Replace Conventional Coagulation Test in the Emergency Department: Experience with 1974 Consecutive Trauma Patients.” *Annals of Surgery* (2012).
24. Adams SD, Cotton BA, McGuire MF, Dipasupil E, Podbielski JM, Zaharia A, Ware DN, **Gill BS**, Albarado R, Kozar RA, Duke JR, Adams PR, Dyer CB, Holcomb JB. Unique pattern of complications in elderly trauma patients at a Level I trauma center. *Journal of Trauma Acute Care Surgery* 2012 Jan; 72(1):112-8.
25. Sharma T, Aroom K, Naik S, **Gill BS**, Zhang J. Flexible Thin-Film PVDF-TRFE Based Pressure Sensor for Smart Catheter Applications. *Annals of Biomedical Engineering* 2013 Apr; 41(4):744-751.
26. Adams SD, Cotton BA, Wade CE, Kozar RA, Dipasupil E, Podbielski JM, **Gill BS**, Adams PR, Holcomb JB. Do Not Resuscitate Status, Not Age, Affects Outcomes After Injury: An Evaluation of 15,227 Consecutive Trauma Patients. *Journal of Trauma and Acute Care Surgery* 2013 May; 74(5):1327-30.
27. Moore, LJ, Wade CE, Vincent L, Podbielski J, Camp E, Junco DD, Radhakrishnan H, McCarthy J, **Gill B**, Holcomb JB. Evaluation of Noninvasive Hemoglobin Measurements in Trauma Patients. *American Journal of Surgery* 2013 December; 206(6):1041-7. Epub October 21, 2013.

## PUBLICATIONS

### Peer Reviewed Publications (continued):

28. Holcomb JH, Fox EE, Scalea TM, Napolitano LM, Albarado R, **Gill BS**, Current Opinion on Catheter-Based Hemorrhage control in Trauma Patients. *Journal of Trauma* 2014 Mar; 76(3):888-93.
29. Moore LJ, Del Junco DJ, Shah M, Albarado R, Cotton BA, **Gill BS**, Kozar RA, Love JD, McNutt M, Tyson GH, Holcomb JB. The Epidemiology of Sepsis in Critically Injured Trauma Patients. *Surgical Infections (in press)*.
30. Sharma T, Naik S, Langevine J, **Gill BS**, Zhang, J. Aligned PVDF-TrFE Nanofibers with High-density Solid and Core-1 Shell Structures for Endovascular Pressure Sensing. *Small Journal (in press)*.
31. Binod S, Holcomb JB, Camp E, Del Junco DJ, Cotton BA, Albarado R, Gill BS, Kozar RA, Kao LS, McNutt MK, Moore LJ, Love JD, Tyson GH, Adams PR, **Khan SA**. Damage Control Resuscitation Increases Successful Non-Operative Management Rates and Survival After Severe Blunt Liver Injury. *The Journal of Trauma and Acute Care Surgery (in press)*.

## PRESENTATIONS

### Invited Presentations:

1. Hardin WD, **Gill BS**, Georgeson KE: Computerized anorectal manometry and profilometry. Presented at the Annual Meeting of the American Academy of Pediatrics, Dallas, TX, October 23, 1994.
2. Killian J, Conklin M, **Gill BS**, Hardin WD: Pediatric pathologic gait. Presented at the Annual Meeting of the American Academy of Pediatrics, Dallas, TX, October 23, 1994.
3. **Gill BS**, Georgeson KE, Hardin WD: Digital enhancement of laparoscopic video. Poster presented at SPIE/Medical Imaging 1995, San Diego, CA, February 28, 1995.
4. **Gill BS**, Georgeson KE, Halpern NB, Hardin WD: Digital video presentations of laparoscopic surgical procedures. Presented at the Annual Scientific Session of the Society of American Gastrointestinal Endoscopic Surgeons, Orlando, FL, March 13, 1995.
5. D' Antonio M, Hedlund G, Royal SA, **Gill BS**, Hardin WD: Association of diaschisis with mirror movements in children with Klippel-Feil deformity. Presented at the Annual Meeting of the Society for Pediatric Radiology, Washington, DC, April 27, 1995.
6. Hedlund G, Royal SA, **Gill BS**, Hardin WD: Computerized radiology case presentations. Interactive poster presented at the Annual Meeting of the Society for Pediatric Radiology, Washington, DC, April 27, 1995.
7. **Gill BS**, Georgeson KE, Hardin WD: Image acquisition in laparoscopic and endoscopic surgery. Poster presented at the IV International Congress for Endosurgery in Children, Orlando, FL, May 17, 1995.
8. **Gill BS**, Sozer SO, Potts JR: Surgical Management of Infected Pancreatic Necrosis. Presented at the Fall Semi-Annual Meeting of the Texas Surgical Society, Austin, TX, October 5, 1998.
9. **Gill BS**, Sozer SO, DePrang C, Hoffman KK, Potts JR. Management of Infected Pancreatic Necrosis. Poster presented at the Annual Meeting of the Southwestern Surgical Congress, Coronado, CA, April 18, 1999.



## PRESENTATIONS

### Invited Presentations (continued):

10. **Gill BS**, Neville HL, Khan AM, Cox CS, Lally KP. Delayed Institution of ECMO Increases Morbidity and Mortality in Meconium Aspiration Syndrome. Presented at the Annual Meeting of the Pacific Association of Pediatric Surgeons, Las Vegas, NV, May 17, 2000.
11. Lally KP, Neville HL, Khan AM, **Gill BS**, Cox CS. Delayed Institution of ECMO Increases Morbidity in Meconium Aspiration Syndrome. Presented at the 11<sup>th</sup> Annual Meeting of the Extracorporeal Life Support Organization, New Orleans, LA, September 17, 2000.
12. Kwong KL, Liu TH, Tamm EP, **Gill BS**, Brown SD, Mercer DW. Do Clinical and Radiographic Prognosticators Reliably Predict Outcomes for ICU Patients With Acute Pancreatitis? Poster presented at 30<sup>th</sup> International Educational and Scientific Symposium of the Society of Critical Care Medicine, San Francisco, CA, February 12, 2001.
13. **Gill BS**, Liu TH, Consorti ET, Kawashima A, Tamm EP, Kwong KL, Mercer DW. Patient Triage Prior to Laparoscopic Cholecystectomy Improves the Utilization of ERCP and Magnetic Resonance Cholangiography. Presented at the Annual Meeting of the American College of Surgeons, South Texas Chapter, San Antonio, TX, March 2, 2001. Winner, Resident Competition for Clinical Papers.
14. **Gill BS**, Liu TH, Kwong KL, Mercer DW: Do Younger Patients With Cholelithiasis Present Differently From Older Patients? Poster presented at the Annual Meeting of the Southwestern Surgical Congress, Cancun, Mexico, April 30, 2001.
15. **Gill BS**. Extreme Surgery: Ethics and Surgical Decision Making in World War II. Grand Rounds presented at the University of Texas-Houston Department of Surgery, Houston, TX, June 3, 2003.
16. **Gill BS**. Multidisciplinary Management of Severe Pelvic Fractures. Grand Rounds presented at the University of Texas-Department of Surgery, Houston, TX, August 26, 2003.
17. **Gill BS**. Ethics and Surgical Decision Making in American History. Grand Rounds Presented at the University of Texas-Houston, Department of Surgery, Houston, TX, July 25, 2004.
18. **Gill BS**. Thermodynamics of Rewarming in Hypothermia. Grand Rounds Presented at the University of Texas-Houston, Department of Surgery, Houston, TX, February 10, 2005.
19. **Gill BS**. Field Treatment of Hypothermia: What's Actually Possible? Presented at Advanced Technology Applications for Combat Casualty Care 2005, St. Petersburg Beach, FL, August 12, 2005.
20. Radhakrishnan RS, Shah K, Xue H, Moore FA, Weisbrodt NW, Allen SJ, **Gill BS**, and Cox CS, Jr. Minimally Invasive Measurement of Intestinal Edema using an Impedance Analyzer Circuit. Presented at Houston Society for Engineering in Medicine and Biology 23rd Annual Meeting, Houston, TX. Feb. 10, 2006.
21. Radhakrishnan RS, Shah K, Xue H, Moore FA, Weisbrodt NW, Allen SJ, **Gill BS**, and Cox CS, Jr. Minimally Invasive Measurement of Intestinal Edema using an Impedance Analyzer Circuit. Presented at Digestive Disease Week 2006, Los Angeles, CA, May 23, 2006.

## PRESENTATIONS

### Invited Presentations (continued):

22. Harting MT, Smith CT, Radhakrishnan RS, Dash PK, **Gill BS**, Cox CS. Regional differences in cerebral edema after traumatic brain injury identified by impedance analysis. *J Am Coll Surg* 205(3S):35, 2007. Presented at the Surgical Forum, American College of Surgeons Annual Meeting, New Orleans, LA, October 14, 2007.
23. **Gill BS**, Aroom KR, Cox CS, Jr. A Portable System for Treatment of Hypothermia on the Battlefield. Presented at the Annual Meeting of the American Society for Artificial Internal Organs, San Francisco, Ca, June 20, 2008. Winner, Lippincott Williams and Wilkins Fellowship for Young Innovators.
24. Aroom KR, Cox CS, **Gill BS**. Tesla Pump Design and Optimization for Pediatric Cardiovascular Support. Poster presented at the Annual Meeting of the American Society for Artificial Internal Organs, San Francisco, CA, June 21, 2008.
25. **Gill BS**, Aroom KR, Cox CS. A Portable System for Management of Hypothermia. Presented at Advanced Technology Applications for Combat Casualty Care 2008, St. Petersburg Beach, FL, August 13, 2008.
26. **Gill BS**. Motor Vehicle Crash Dynamics. Grand Rounds presented at the University of Texas – Houston, Department of Surgery, Houston, TX, February 12, 2009.
27. **Gill BS**, Dubinsky W, McGuire M, Finkel K, Podoll A, Jastrow K, Jimenez F, Gonzalez EA, Holcomb JB. Early Serum and Urine Biomarkers Predict Acute Kidney Injury in Selected Patients After Major Trauma. Poster presented at the 32<sup>nd</sup> Annual Meeting of the Shock Society, San Antonio, TX, June 8, 2009.
28. **Gill BS**. Motor Vehicle Crash Dynamics. Presented at the Annual Meeting of the Southeastern Texas Trauma Regional Area Council, Humble, TX, August 6, 2009.
29. Shah SK, Fogle LN, Aroom KR, **Gill BS**, Uray KS, Laine GA, Stewart RH, Cox CS. Mechanotransduction as a Mechanistic Explanation for Edema-induced Intestinal Dysfunction. *Journal of the American College of Surgeons*, 209(3), page S43. Presented at the Surgical Forum, American College of Surgeons Annual Meeting, Chicago, IL, October 13, 2009.
30. Adams SD, Cotton BA, Dipasupil E, Podbielski JM, Zaharia A, McGuire MF, Jastrow K, Ware DN, **Gill BS**, Albarado R, Kozar RA, Gonzalez EA, Duke JH, Adams PR, Dyer CB, Holcomb JB. The Unique Pattern of Complications in Elderly Trauma Patients at a Level I Trauma Center. Presented at the 40<sup>th</sup> Annual Meeting of the Western Trauma Association, Telluride, CO, March 3, 2010.
31. Aroom K, Cox CS, **Gill BS**. "Brain based electrospun tissue scaffolds: a parametric study." The 56th Annual Meeting of the American Society for Artificial Internal Organs, Baltimore, MD, May 27, 2010.
32. Sang-Soo,Je, Sharma T, Lee Y, **Gill BS**, Zhang J. Fabrication and characterization of Air-Fluidic Thin-film PVDF-TrFE Pressure Sensors. Abstract published in 2011 IEEE 24th International Conference Micro Electro Mechanical Systems, pp.644-647.
33. **Gill BS**, Dubinsky W, Golunski E, Conyers J, Holcomb JB. Plasma Protein Concentrations Change During Storage After Thawing of Fresh Frozen Plasma. Poster presented at the 33<sup>rd</sup> Annual Meeting of the Shock Society, Portland, OR, June 14, 2010.
34. Je SS, Sharma T, Lee Y, **Gill BS**, Zhang J. A Thin Film Piezoelectric PvdF-Trfe Based Implantable Pressure Sensor Using Lithographic Patterning. The 24th IEEE Conference On Micro Electro Mechanical Systems (MEMS) 2011, Cancun, Mexico, January 25, 2011.

## PRESENTATIONS

### Invited Presentations (continued):

35. Sharma T, Je S, **Gill BS**, Zhang J. Patterning piezoelectric thin film PVDF–TrFE based pressure sensor for catheter application. Presented at the 24th IEEE International Conference on Micro Electro Mechanical Systems, Cancun, Mexico, January 2011.
36. Shah SK, Cox CS Jr, Xue H, Aroom KR, Walker PA, **Gill BS**, Jimenez F, Moore-Olufemi SD. Non-occlusive mesenteric hypertension: Elucidating the pathophysiology of gastroschisis-related intestinal dysfunction. The 6th Annual Academic Surgical Congress, Huntington Beach, CA, February 1-3, 2011.
37. Holcomb JB, Minei KM, Scerbo ML, Wade CE, Kozar RA, **Gill BS**, Albarado R, McNutt MK, McCarthy JJ, Cotton BA. Admission Rapid Thrombelastography (r-TEG) Can Replace Conventional Coagulation Test in the Emergency Department: Experience with 1974 Consecutive Trauma Patients.” ASA Annual Meeting, San Francisco, CA April 26-28, 2012.
38. **Gill BS**, Hybrid OR Technology Overview. THOR Meeting, Houston, TX, February 26-27, 2013.
39. Scalea T, **Gill BS**, Patient Flow and Treatment Possibilities. THOR Meeting, Houston, TX February 26-27, 2013.
40. Sharma T, Langevine J, Naik S, Aroom K, **Gill BS**, Zhang J. Aligned Electrospun PVDF-TrFE Nanofibers For Flexible Pressure Sensors on Catheter. Transducers 2013, Barcelona, Spain, June 18, 2013.

## PATENTS:

1. United States Patent # 7,261,557: “Portable Fluid Warming System”  
Inventors: **Gill, Brijesh**; Cox, Charles  
Filed: July 7, 2004  
Published: January 12, 2006  
Issued: August 28, 2007  
Assignee: The Board of Regents of the University of Texas System  
Licensee: EMIT Corporation, Clear Lake, TX
2. Additional citations for this technology:  
10/886,191;  
11/832,415;  
PCT/US05/47209 (International);  
PCT/US08/70812 (International).
3. United States Patent Application 61/074,053: “Centrifugal pump”  
Inventors: **Gill, Brijesh**; Cox, Charles; Aroom, Kevin.  
Filed: June 20, 2008.  
Status: Pending
4. United States Patent Application 61/236,442: “Automated Needle Insertion System”  
Inventors: **Gill, Brijesh**; Longoria, Raul; Aroom, Kevin; Espinoza, Albert; Bjelica, Alex; Cox, Charles.  
Filed: August 19, 2009.  
Status: Pending

## **PATENTS (continued):**

5. United States Patent Application 61/706,752: “Compact Fluid Warmer”  
Inventors: **Gill, Brijesh**; Cox, Charles, Aroom, Kevin, Sheldon, Jeff, Westerbeck, Todd  
Filed: October 22, 2012  
Status: Pending
  
6. European Patent EP2211799B1: “Portable Fluid Warmer”  
Inventors: **Gill, Brijesh**; Cox, Charles  
Filed: July 23, 2008  
Issued: December 18, 2013  
Assignee: The Board of Regents of the University of Texas System  
Licensee: EMIT Corporation, Clear Lake, TX
  
7. United States Patent Application 61/699,494 “Blood Coagulometer”  
Inventors: **Gill, Brijesh**; Cox, Charles, Aroom, Kevin  
Filed: September 10, 2012  
Status: Pending
  
8. International Patent Application WO 2014/043251 A1  
“Blood Coagulometer and Method”  
Inventors: **Gill, Brijesh**; Cox, Charles, Aroom, Kevin  
International Filing Date: September 11, 2013

## **CORPORATE:**

1. EMIT Corporation, Clear Lake, TX. Scientific Advisory Board. March 2009-present.