

April 21-22, 2016

Hill Country Hyatt, San Antonio, Tx

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SYSTEMS  
ENGINEERING  
IN HEALTHCARE



## AGENDA

### Wednesday, April 20, 2016 - Pre- Conference

### Meeting Room

|                |  |             |
|----------------|--|-------------|
| 1:00 - 5:00 PM | Registration Check-in  | Bandera A   |
| 2:00 – 4:00 PM | Pre-Conference Session (#1)<br><i>Sustainability - Michele Bosworth, MD, UTHSC - Tyler</i>   | Brandy      |
| 2:00 – 4:30 PM | Pre-Conference Session (#2)<br><i>A Taster's Tour of Healthcare Systems Engineering at<br/>UT MD Anderson Cancer Center</i> <ul style="list-style-type: none"><li>• Overview - <b>Victoria Jordan, PhD</b></li><li>• Proton Therapy – <b>Douglas Durbin and Nick Olivieri</b></li><li>• Room Utilization – <b>Ashley Robinson</b></li><li>• Access Algorithm – <b>Laura Burke</b></li><li>• Clinical Trial Planning and Operation Monitoring – <b>Wei Liu, PhD</b></li><li>• Perometer Variance Reduction (for Lymphedema screening)<br/><b>Parviz Kheirkhah, PhD and Simona F. Shaitelman, MD, EdM</b></li><li>• Radiation Therapy Treatment Planning Optimization under Uncertainties<br/><b>Maryam Zaghian, PhD</b></li></ul> | Hondo       |
| 5:00 – 6:30 PM | UT System Imaging Collaborative Discussion<br><b>Joseph Steele, MD, UT MD Anderson Cancer Center</b>   | Bandera B/C |

### Thursday, April 21, 2016

|                  |   |                             |
|------------------|---|-----------------------------|
| 7:30 AM          | Registration and Continental Breakfast  | Hill Country Ballroom Foyer |
| 8:30 AM          | Opening Remarks   | Hill Country Ballroom       |
| 8:40 – 10:00 AM  | Opening Keynote:<br><i>There's a Patient on the Care Team: A New Design for Health and Healing</i><br><b>Laura Adams, President and CEO</b><br>Rhode Island Quality Institute |                             |
| 10:00 - 10:15 AM | Coffee Break  |                             |
| 10:15 - 11:30 AM | Poster Session  | Hill Country Ballroom E     |
| 11:30 - 1:00 PM  | Light Lunch and Keynote Speaker<br><i>Reliability in Health Care, Why is it Important?</i><br><b>John Hensing, MD, Executive Vice President and CMO</b><br>Banner Health      | Rogers Wiseman Pavilion     |

1:00 – 2:00 pm

ORAL PRESENTATIONS

SESSION 1 – SYSTEMS ENGINEERING GRANT REPORTS

Hill Country Ballroom F-G

- *Reducing Avoidable Harm from Device Related Healthcare Associated Infection*  
**Chanhaeng Rhee, MD, MBA**  
UT Southwestern Medical Center Dallas
- *Design an Elective Surgery Systematic Pathway and CORE Grant to support Systems Engineering Projects at UTMB*  
**Adam G. Spieker, MBA**  
UT Medical Branch Galveston

SESSION 2 – CS&E ABSTRACT PRESENTATIONS

Brady

- *Reducing Coagulase Negative Staphylococcus Aureus (CoNS) Contamination of Blood Cultures in the Neonatal Intensive Care Unit (NICU)*  
**Preethi Srinivasakumar, MD**  
UT Southwestern Medical Center
- *Improving the Quality of Oral Health Care for the Diabetic Patient in Dental School Outpatient Clinics*  
**Gary Guest, DDS**  
UT Health Science Center - San Antonio
- *Improving IDWG in Dialysis Patients*  
**Chandandeep Takkar, MD and Laura Montes, RN**  
UT Health Science Center - San Antonio

SESSION 3 – CS&E ABSTRACT PRESENTATIONS

Hill Country Ballroom A-D

- *Implementation of a Postpartum Depression Screening Tool in a Pediatric Outpatient Primary Care Resident Clinic*  
**Karen Wittenburg, MD, Michelle Gallas, DO and Tara Greendyk, MD**  
UT Austin Dell Medical School
- *Scheduling Quality: Utilization of 4+1 Block Rotations to Build Systems of Care and Quality into Resident Education*  
**Megan Freeman, MD and Patricia Wathen, MD**  
UT Health Science Center - San Antonio
- *Fundamentals of Quality Improvement Certificate*  
**Robert Joyce, MS, CPLP and Barbara Shelton, MS**  
UT MD Anderson Cancer Center

2:00 - 2:15 PM

Move Rooms/Coffee Break

2:15 - 3:15 PM

ORAL PRESENTATIONS

SESSION 4 – SYSTEMS ENGINEERING GRANT REPORTS

Hill Country Ballroom A-D

- *Improving Inpatient & Outpatient Throughput by Computer Simulation - ICU, DI, Rad Oncology*  
**Joseph Steele, MD, Joseph Nates, MD, Emily Norboge, MPSA**  
UT MD Anderson Cancer Center

SESSION 5 – SYSTEMS ENGINEERING GRANT REPORTS

Brady

- *Improving Patient Flow and Resource Utilization in ED*  
**Yashwant Chathampally, MD**  
UT Health Science Center Houston
- *Improving Lab Order, Verification and Follow-Up Processes at UT Physicians*  
**Eric Thomas, MD, MPH**  
UT Health Science Center Houston

**Thursday, April 21, 2016 (cont.)**

**Meeting Room**

|                |  |                           |
|----------------|--|---------------------------|
| 2:15 - 3:15 PM | ORAL PRESENTATIONS<br>SESSION 6 – CS&E ABSTRACT PRESENTATIONS  | Hill Country Ballroom F-G |
|                | <ul style="list-style-type: none"><li>• <i>Decreasing Drug Transfer Times Between Retail Pharmacies – Drug Trac</i><br/><b>Nikki Bui, PharmD and Thuy Tran, PharmD</b><br/>UT MD Anderson Cancer Center</li><li>• <i>Preventing Over-inflation of the Tracheal Tube Cuff During General Anesthesia</i><br/><b>Eric Rosero, MD and Meghan Michael, MD</b><br/>UT Southwestern Medical Center</li><li>• <i>Reduced Scan Time for Computed Tomography Patients with Delayed Images</i><br/><b>Bilal Mujtaba, MD and Priya Bhosale, MD</b><br/>UT MD Anderson Cancer Center</li></ul>  |                           |
| 3:15 - 3:30 PM | Move Rooms/Coffee Break  |                           |
| 3:30 – 5:00 PM | Choose one of the following panel discussions to attend  |                           |
|                | <i>Improving Diagnosis in Healthcare</i><br>Moderator: <b>Eric Thomas, MD, MPH</b> , UTHSC- Houston<br>Panelists: <b>Hardeep Singh, MD, MPH</b> , Baylor Medical & Houston VA<br><b>Dean F. Sittig, PhD</b> , UT Health School of Biomedical Informatics, UTHSC - Houston  | Hill Country Ballroom F-G |
|                | <i>Non-Traditional Applications of Healthcare Systems Engineering</i><br>Moderator: <b>Victoria Jordan, PhD</b> , UT MD Anderson Cancer Center<br>Panelists: <b>Douglas Morrice, PhD</b> , UT Austin McCombs School of Business<br><i>Operations Management</i><br><b>Tim Peglow, MBA, MSE</b> , UT MD Anderson Cancer Center<br><i>Using Lean and Six Sigma in Housekeeping and Maintenance at UT MD Anderson Cancer Center</i><br><b>Pam Redden, MS, BSN, RN EDAC</b> , UT Austin Dell Medical School<br><i>Using Systems Engineering Tools Such as Value Stream Mapping and Mathematical Simulation to Optimize Facility Design</i> | Hill Country Ballroom A-D |
| 6:30 - 7:00 PM | Reception (cash bar)   | Rogers Wiseman Pavilion   |
| 7:00 - 8:30 PM | Awards Dinner<br>CS & E awards, new fellows introduced and program update  | Rogers Wiseman Pavilion   |

**Friday, April 22, 2016**

|                |   |                             |
|----------------|---|-----------------------------|
| 8:00 AM        | Continental Breakfast   | Independence Ballroom Foyer |
| 8:30 - 9:30 AM | Keynote Speaker<br><i>Accelerating Innovations in Health</i><br><b>S. Clay Johnston, MD, PhD</b><br><b>Dean and Vice President for Medical Affairs</b><br>The University of Texas at Austin Dell Medical School | Independence Ballroom 1-3   |
| 9:30 - 9:45 AM | Move Rooms/Coffee Break   |                             |

|                  |   |                           |
|------------------|---|---------------------------|
| 9:45 - 10:45 AM  | ORAL PRESENTATIONS  |                           |
|                  | SESSION 7 – SYSTEMS ENGINEERING GRANT REPORTS   | Brady                     |
|                  | <ul style="list-style-type: none"><li>• <i>Implementing a Patient-Centered Surgical Home</i><br/><b>Luci K. Leykum, MD</b><br/>UT Health Science Center at San Antonio</li><li>• <i>Optimizing House Staff Schedules and Patient Access in Primary Care Teaching Clinics</i><br/><b>Luci K. Leykum, MD</b><br/>UT Health Science Center at San Antonio</li></ul>  |                           |
|                  | SESSION 8 – CS&E ABSTRACT PRESENTATIONS   | Bandera                   |
|                  | <ul style="list-style-type: none"><li>• <i>Get to Green: Improving Team Communication to Reduce Ventilator Hours</i><br/><b>Alexandris Aman and Bela Patel, MD</b><br/>UT Health Science Center - Houston</li><li>• <i>Reporting to FDA MedWatch: Evaluating the Implementation of a Standardized Adverse Drug Reaction Reporting Algorithm in a Comprehensive Cancer Center</i><br/><b>Sayer Monroe, PharmD</b><br/>UT MD Anderson Cancer Center</li><li>• <i>My Pain's a 10, Doc!</i><br/><b>Adrian Nedelcut and Lisa Bailey, RN</b><br/>UT Health Science Center Tyler</li></ul> |                           |
|                  | SESSION 9 – CS&E ABSTRACT PRESENTATIONS   | Independence Ballroom 1-3 |
|                  | <ul style="list-style-type: none"><li>• <i>Reduce Wait Time for Add-on OR Patients in Clinical Nuclear Medicine (CNM)</i><br/><b>Dao Le, PharmD and Scottie Jones, MBA</b><br/>UT MD Anderson Cancer Center</li><li>• <i>Optimizing General Ultrasound Workflow</i><br/><b>Rhoda Reading, BSBA, RDMA, RT and Silvana Faria, MD, PhD</b><br/>UT MD Anderson Cancer Center</li><li>• <i>Improved Colorectal Cancer Screening Rates in East Texas</i><br/><b>Carlton Allen, MS</b><br/>UT Health Science Center Tyler</li></ul>  |                           |
| 10:45 - 11:00 AM | Move Rooms/Coffee Break   |                           |
| 11:00 - 12:00 PM | ORAL PRESENTATIONS  |                           |
|                  | SESSION 10 – SYSTEMS ENGINEERING GRANT REPORTS  | Brady                     |
|                  | <ul style="list-style-type: none"><li>• <i>Improving Diabetes and Obesity Care in Sparse Population Areas</i><br/><b>Hiram Moya, PhD</b><br/>UT Rio Grande Valley</li><li>• <i>Improving Inventory Management Systems in the Division of Pharmacy</i><br/><b>Parviz Kheirkhah, PhD</b><br/>UT MD Anderson Cancer Center</li></ul>   |                           |

SESSION 11 – SYSTEMS ENGINEERING GRANT REPORTS

Bandera

- *Integrated Care for Patients with COPD*  
**Gulshan Sharma, MD, MPH**  
UT Medical Branch Galveston
- *Money for Training and Industrial Engineering Support*  
**Michele Bosworth, MD and Brenda Lee, MSN, RN**  
UT Health Science Center - Tyler

SESSION 12 – CS&E ABSTRACT PRESENTATIONS

Independence Ballroom 1-3

- *The DISINFECT Initiative: Decreasing the Incidence of Surgical Infections in Gynecologic Oncology*  
**Jolyn Taylor, MD and Claire Marten, PharmD**  
UT MD Anderson Cancer Center
- *Improving Bone Health for Prostate Cancer Patients on Androgen Deprivation Therapy*  
**Jeong-he Ku, MD**  
UT Southwestern Medical Center
- *Impact of a Physician Dashboard on Episiotomy Utilization at William P. Clements, Jr. University Hospital*  
**Katherine Xiong and Robyn Horsager-Boehrer, MD**  
UT Southwestern Medical Center

12:00 NOON

Conference Concludes