Learn more about how the Center for Healthcare Engineering and Patient Safety (CHEPS) is improving the safety and quality of healthcare delivery by identifying, fostering, and promoting collaborative projects across the University.

Posters will represent collaborations between:
- College of Engineering
- Medical School
- School of Public Health
- School of Nursing
- Michigan Medicine
- and more...
Masco Commons (3rd Floor)
The Center for Healthcare Engineering & Patient Safety CHEPS
Master’s Concentration in Healthcare Engineering & Patient Safety CHEPS
The Institute for Healthcare Policy and Innovation IHPI
Michigan Institute for Clinical and Health Research MICHR
Seth Bonder CHEPS and The Seth Bonder Foundation
The Seth Bonder Foundation CHEPS and The Seth Bonder Foundation

Johnson Rooms (3rd Floor)
A Dynamic Approach to Improve Chemotherapy Pre-mix Policies
Donald Richardson, Hwon Tak, Matthew See, Amy Cohn

A Stochastic Programming Approach to Determine Decision Boundaries for Medical Diagnosis
Gian-Gabriel P. Garcia, Mariel S. Lavieri, Ruiwei Jiang, Michael McCrea, Thomas W. McAllister, Steven P. Broglio, CARE Consortium Investigators

Annual Block Scheduling for Medical Residents
Amy Cohn, Erick Dagenais, Junhong Guo, Daniel Huang, William Pozehl

Aperture Control for VMAT Planning Systems
Wilmer E. Henao, Marina Epelman, Edwin Romeijn, Kelly Younge, Carlos Anderson, Martha Matuszak

Augmenting Cancer Surveillance with Machine Learning
Erkin Otles, John Wei, Brian Denton

Challenges with Data Collection in Methods to Reduce Clinic Wait Times
Rachel Moeckel, Paula Anne Newman-Casey, Amy Cohn

Data-Driven Tools for Patient Risk Stratification for ARDS
Student Authors: Daniel Zeiber, Tejas Prahlad, Faculty Mentors: Michael Sjoding, Jenna Wiens

Dermatology Residency Shift Scheduling Tool
William Pozehl, Justin Moss, Justin Rogers, Samantha Roth, Chloe Smither, Amy Cohn

M-Safety P1: Improving Awareness of Catheters to Reduce Hospital-Acquired Infection
Dale Mallette, Ian McKenzie, Matt See, Lauren Hirth, Roshun Sankaran, Jessica Ameling, Amy Cohn, Jennifer Meddings

Trust in Robotic Assistance
X. Jessie Yang

Using Lean Tools to Identify Opportunities for Improvement in the Michigan Medicine Children’s Emergency Services
Prashant Mahajan, Nicole Sroufe, Kelly Baird-Cox, Gagan Gupta, Anavir Shermon, Emily Smith, Hailey Willett
GM Room (4th Floor)

Analyzing the Variability in Colonoscopy Appointments Using a VBA-Based Tool to Help in Improving the Schedule
Bassel Salka, Daniel Huang, Trevor Hoffman, Stephanie See, Amy Cohn, Jacob Kurlander, Sameer Saini, Karmel Shehadeh

CogPod: Patient Safety Enhancement and Cognitive Labor
Robert Adams, John Hyun Hang Cho, Yixue Wang, Javiera Oyarzun Balut, Swati Goel, Carlos Pompeo, Suzanne Winter, Amy Cohn, Sanjay Saint, Vineet Chopra

Drug Shortages: A Supply Chain Analysis with Implications for Policy
Emily L. Tucker, Mark S. Daskin, Burgunda V. Sweet, Wallace J. Hopp

Evaluating Lean as an Implementation Approach in ED-SAFE 2
Sharon A. Johnson, Lori Pelletier, Celine Larkin, Edwin D. Boudreaux

Focused Ethnography to Improve Diagnosis in Teaching Hospitals: Introducing the Michigan Model of Diagnosis
Vineet Chopra, Molly Harrod, Suzanne Winter, Jane Forman, Martha Quinn, Sarah Krein, Karen E. Fowler, Hardeep Singh, Sanjay Saint

Improving the Patient Experience: Classifying Patient Wait Times
Trevor Hoffman, Hanan Al-Awadhi, Rachel Moeckel, Erick Dagenais, Paula Anne Newman-Casey, Leslie Nizioł, John Musser, Abhilash Rao, Henry Ellis, Nish Patel, Grace Trinidad, Amy Cohn

Introduction of a Standardized Decontamination Process in Central Sterile Processing Departments
William Pozehl, Lauren Hirth, Dale Mallette, Ian McKenzie, Wesley Chen, Joseph DeRosier, James Bagian

Medicare’s Merit-based Incentive Payment System (MIPS): Will Cost Measures be Reliable?
Paige E VonAchen, Rodney A. Hayward, Edward Norton, Brian Denton, Chad Ellimoottil

Optimizing Resident Call Assignments
Kevin Li, Bassel Salka, Steven Macpherson, Dale Mallette, Anna Learis, William Pozehl, Amy Cohn, Luke O. Pesonen

Predictive Analytics for Prostate Cancer Treatment Decision Making
Bo Qu, Karandeep Singh, Selin Merdan, Zheng Zhang, Greg Auffenberg, Todd Morgan, Samuel Kaffenger, Brian T. Denton

Reinventing Urban Transportation and Mobility
Joshua Lustig, Kevin Li, Tawanna Dillahunty, Patrick Carter, Justin Rogers, James McAuliffe, Jingxue Xu, John Cima, William Pozehl, Amy Cohn

Schedule of Events

5:00 – 7:30
Refreshments, posters from across the university & beyond, networking.

6:00
Remarks

7:00
Ballots due for Best Poster Award. Turn in at registration table.

7:15
Poster award announcement, twitter raffle prize, closing remarks.

Poster Voting & Raffle

Turn in your ballot at the registration table before 7:00 p.m. to vote for the People’s Choice Best Poster Award!
Tweet with hashtag #cheps2017 for a chance to win a raffle prize.

GIVING BLUEDAY
11.28.17

Consider CHEPS for your Giving BlueDay giving. See our website at cheps.engin.umich.edu for a giving link.
Providing Better Healthcare through Systems Engineering: Seminars and Discussions

**Mondays Fall 2017**

4:40PM 1123 LBME

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenter and Affiliation</th>
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<tbody>
<tr>
<td>September 11</td>
<td>“Identifying Optimal Antibiotic Regimens for TB Treatment”</td>
<td>Joseph Cicchese, PhD candidate U-M Linderman Research Group</td>
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<tr>
<td>September 18</td>
<td>“Secure Messaging and Personal Health Records: Designing Customer-Facing Processes”</td>
<td>Sharon Johnson, PhD, Prof. Worcester Polytechnic Institute</td>
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<tr>
<td>September 25</td>
<td>“The Bloodmobile Routing Problem”</td>
<td>Grisselle Centeno, PhD, Assoc. Prof. U of South Florida</td>
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<td>October 2</td>
<td>“Nurses' Trust in Robotic Assistance on the Labor Floor”</td>
<td>X. Jessie Yang, Asst. Prof., U-M IOE</td>
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<tr>
<td>October 9</td>
<td>“Using Decision Modeling to Inform Newborn Screening Policy Decisions for Pompe Disease: A Case Study”</td>
<td>Lisa Prosser, PhD, Professor Michigan Medicine Pediatrics &amp; SPH</td>
</tr>
<tr>
<td>October 30</td>
<td>&quot;Deep Monitoring Chronic Disease in Underserved and Remote Populations&quot;</td>
<td>David T. Burke, PhD, Professor Michigan Medicine Human Genetics</td>
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<tr>
<td>November 6</td>
<td>5th Annual Symposium on Healthcare Engineering and Patient Safety, 5-7:30PM *time change!</td>
<td>3rd/4th flrs Lurie Engin. Center 1221 Beal Ave *location change!</td>
</tr>
<tr>
<td>November 13</td>
<td>“Patient Safety: Challenges and Ways to Overcome Them”</td>
<td>Jim Bagian, MD, U-M IOE/CHEPS</td>
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<td>November 20</td>
<td>“Health Systems Engineering and Implementation Science: Using the Best of Both Worlds to Standardize Periprocedural Anticoagulation”</td>
<td>Geoffrey Barnes, MD, MSc Michigan Medicine Cardiology</td>
</tr>
<tr>
<td>November 27</td>
<td>“From Big Data to Small Decisions: Fulfiling the Potential of Precision Health”</td>
<td>Sachin Kheterpal, MD, MBA Michigan Medicine Anesthesiology</td>
</tr>
<tr>
<td>December 4</td>
<td>“Block Scheduling for Medical Residents”</td>
<td>Amy Cohn, PhD, U-M IOE/CHEPS Billy Pozehl, MSE, U-M IOE/CHEPS Garth Strohbehn, MD, Chief Res.</td>
</tr>
<tr>
<td>December 11</td>
<td>“Multi-dimensional, Highly Time-resolved Big Data Approach for Disease Prediction”</td>
<td>Sung Won Choi, MD, MS, Mich Med Jenna Wiens, PhD, Asst. Prof., CSE</td>
</tr>
</tbody>
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Please note: There will be no seminars on the Mondays of October 16 and October 23 due to Fall Break and INFORMS.

Please note on location: 1123 LBME is room 1123 in the Ann & Robert H. Lurie Biomedical Engineering Building (LBME). Street address is 1101 Beal Ave., map and directions: [http://www.bme.umich.edu/about/directions.php](http://www.bme.umich.edu/about/directions.php).

This seminar series is presented by the U-M Center for Healthcare Engineering and Patient Safety (CHEPS): Our mission is to improve the safety and quality of healthcare delivery through a multi-disciplinary, systems-engineering approach.

For additional information and to be added to the weekly e-mail for the series, please contact genehkim@umich.edu.