

2023

CHEPS Symposium

Monday, November 6th

5 – 7:30 PM

Robert H. Lurie Engineering Center
3rd and 4th Floors



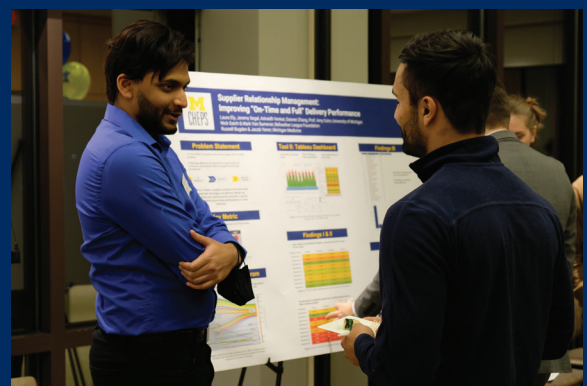
Learn more about how the **Center for Healthcare Engineering & Patient Safety** (CHEPS) is improving the safety and quality of healthcare delivery by identifying, fostering, and promoting collaborative projects across the University.

The symposium features refreshments, networking opportunities, and research from U-M and beyond.

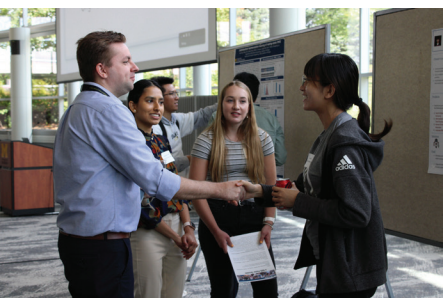
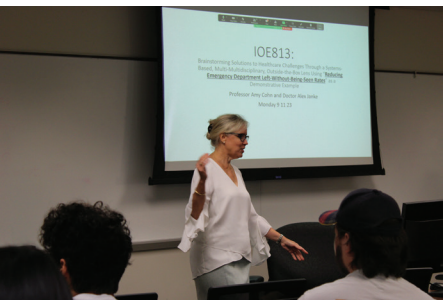


Posters represent collaborations between:

- U-M College of Engineering
- Michigan Medicine
- Veterans Association Healthcare System
- MI Dept. of Health and Human Services



Photographs and videos taken at this event may be used to promote CHEPS, the College of Engineering, and the University.



3rd Floor Posters

P01 Algorithmic Advances to Help Evaluate Sources of Infeasibility in Healthcare Scheduling Problems
Daiwen Zhang, Amy Cohn, and Marina Epelman

P02 Alleviating Provider Burnout by Reducing Inbox Volume
Arman Getzen, Cynthia Joy Johnson Monickaraj, Thomas Adelman, Chidimma Udegbumam, Eve Shikanov, Amy Cohn, and Luke DeRoos

P03 Creating a Safe-Discharge Pathway for Low-Risk Pulmonary Embolism [PE] Patients from the Emergency Department
Colin Greineder, Geoff Barnes, Connor O'Hare, Liz Joyce, Val Gavrila, and Tony Cuttitta

P04 e-HAIL: Making the University of Michigan a Premier Hub for e-Health and AI to Improve Health Using Technology
Henrike Florusbosch, Rada Mihalcea, and Akbar Waljee

P05 Modeling Resource Needs for Screening Interventions in the U.S. Veterans Healthcare System
Aparna Reddy, Krithika Venkatasubramanian, Mengting Tu, Yiran Zhang, Kira Woodhouse, Sara Li, Hooman Niktafar, Amy Cohn, and Nithya Ramnath

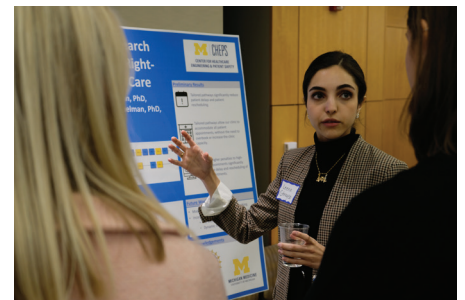
P06 People of The Extraordinarily Roundaboutedly Acronymed Data Analytics Club That You Love (PTERADACTYL)
Beth Plotts, Liz Downs, Jim Hiner, Gillian Mayman, and Caryn Boyd

P07 Predicting Next Week's Bed Census: Combining Medical Expertise with Data
Hayo Bos, Stef P.R. Baas, Richard J. Boucherie, Erwin W. Hans, and Gréanne Loeffink

P08 Prioritizing Specialty Care Access Leveraging Morphomics
Faith Jones, Sogand Soghrati Gasbeh, Chloe Qi, Cole Weber, Emmett Springer, Patrick Belancourt, Amy Cohn, Sameer Saini, and Grace Su

P09 Tailoring Prenatal Care to Improve Patient and Clinical Outcomes
Amber Campbell, Natalia Eddy, Arman Getzen, Cynthia Joy Johnson Monickaraj, Leena Ghrayeb, Amy Cohn, and Alex Peahl

P10 Variation in Ineligible Donor Use in the U.S. at the Level of the Transplant Center and the Organ Procurement Organization
Yili Wang, Luke DeRoos, Peter Todd, Beiming Li, Mariel Lavieri, Elliot Tapper, David Hutton, and Neehar Parikh



4th Floor Posters

- P11 **Building a Staffing and Attendance Tool for State of Michigan Psychiatric Hospitals**
Madison Heyer, Shun Akiyama, Pranathi Dandamudi, Lydia Kim, Elinora de la Zerda, Stephen Love, William Pozehl, Amy Cohn, and George Mellos
- P12 **Deep Learning-Assisted Appointment Scheduling with Patient Unpunctuality**
Amirhossein Moosavi, Onur Ozturk, Rafid Mahmood, and Jonathan Patrick
- P13 **Integrated Shift Schedules and Room Assignments for Interventional Radiology Technologists**
Alexios Avrassoglou, Yanru Guo, Ethan Kraus, Chengyue Zhang, Marina Epelman, and Billy Pozehl
- P14 **Joint Optimization Model to Generate Integrated Day and Night ACS Department Schedules**
Alexios Avrassoglou, Reilly Hanson, Faith Jones, Gabriel Ferriero, Cole Martin, Yueyun Xia, Marina Epelman, and Billy Pozehl
- P15 **Prediction of Symptom Burden, Cognitive Status, and Risk of Psychological Distress in NCAA Athletes with Sport-Related Concussion(s)**
Lauren L. Czerniak, Gian-Gabriel P. Garcia, Max W. Genthe, Yueyun Xia, Mariel S. Lavieri, Michael A. McCrea, Thomas W. McAllister, Paul F. Pasquina, Spencer W. Liebel, Steven P. Broglio, and CARE Consortium Investigators
- P16 **Prevent Disasters in Residential Care Facilities? Intelligent Staff Scheduling for Future Pandemics**
Amirhossein Moosavi, Onur Ozturk, and Jonathan Patrick



The Center for Healthcare Engineering & Patient Safety (CHEPS) would like to sincerely thank the Bonder Foundation for their generous and longstanding support, without which our work would not be possible.



Who's Who at CHEPS Fall '23

STUDENTS



Thomas Adelman
IOE Undergraduate



Shun Akiyama
CSE Undergraduate



Josh Asai
IOE Undergraduate



Alexios Avrassoglou
IOE Masters



Tyler Bush
IOE Undergraduate



Amber Campbell
CSE Undergraduate



Danny Colón
IOE Masters



Pranathi Dandamudi
CSE Undergraduate



Elinoa de la Zerda
IOE Undergraduate



Natalia Eddy
CSE Undergraduate



Hannah Eller
BME Undergraduate



Gabe Ferriero
IOE Undergraduate



Arman Getzen
BME Undergraduate



Leena Ghayeb
IOE PhD



Brooke Gietzen
BME Undergraduate



Reilly Hanson
IOE Undergraduate



Alison Haskell
BME Undergraduate



Maddy Heyer
CSE Undergraduate



Faith Jones
IOE Undergraduate



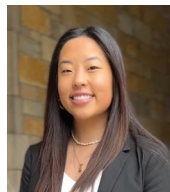
Robynne Jones-Bellamy
Biology Undergraduate



Cynthia Joy
IOE Masters



Esha Kaul
CS-LSA Undergraduate



Lydia Kim
CS-LSA Undergraduate



Ethan Kraus
CSE Undergraduate



Gabrielle LeFlore
Business Administration
Masters



Sara Li
CSE Undergraduate



Cole Martin
IOE Undergraduate



Jared Pavlick
IOE Masters



Anjali Petrucci
IOE Undergraduate



Aparna Reddy
Public Health
Undergraduate



Nardine Samuel
BCN Undergraduate



Eve Shikanov
IOE Masters



Zaid Siddiqui
CSE Undergraduate



Sogand Soghrati
IOE PhD



Mengting Tu
CSE Undergraduate



Chidimma Udegbuma
BCN Undergraduate



Krithika Venkatasubramanian
CS-LSA Undergraduate



Kira Woodhouse
HEPS Masters



Daiwen Zhang
IOE PhD



Yiran Zhang
IOE Masters

FACULTY & STAFF



Hannah Buck
Communications Specialist



Amy Cohn
Faculty Director



Luke DeRoos
Senior Business
Intelligence Analyst



Marina Epelman
Faculty Affiliate



Gene Kim
Administrative Assistant



Christy Linebaugh
Program Director



Amirhossein Moosavi
MIDAS Postdoctoral Fellow



Hooman Niktafar
Software Manager



Billy Pozehl
Research Manager