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

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 Leeftink

P08 Prioritizing Specialty Care Access Leveraging Morphomics
Faith Jones, Sogand Soghrati Gasbeh, Chloe Qi, Cole Weber, Emmett Springer, Patrick Belamcund, 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 Peah

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, Elinoa 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 Colon: IOE Masters
- Pranathi Dandamudi: CSE Undergraduate
- Elinoa de la Zerda: IOE Undergraduate
- Natalia Eddy: CSE Undergraduate

- Hannah Eller: BME Undergraduate
- Gabe Ferraro: IOE Undergraduate
- Arman Getzian: BME Undergraduate
- Leena Ghazyeb: IOE PhD
- Brooke Getzian: BME Undergraduate
- Reilly Hanson: IOE Undergraduate
- Alison Haskell: BME Undergraduate
- Madhul Hoyer: CSE Undergraduate
- Farith Jones: IOE Undergraduate
- Robynne Jones-Bellamy: Biology Undergraduate

- Cynthia Joy: IOE Masters
- Esha Kaul: CSE-LSA Undergraduate
- Lydia Kim: CSE 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 Sohrati: IOE PhD
- Mengting Tu: BCN Undergraduate
- Chidimma Udegibunam: BCN Undergraduate
- Krithika Venkasubramanian: CS-LSA Undergraduate
- Kira Woodhouse: CSE Undergraduate
- 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: MDAS Postdoctoral Fellow
- Hooman Niskafar: Software Manager
- Billy Pozehl: Research Manager
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- Hooman Niskafar: Software Manager
- Billy Pozehl: Research Manager